FCC Test Report

Product Name	Moxa 2.4/4.9/5 GHz
Model No	WAPN008-1
FCC ID	SLE-WAPN008-1

Applicant	Moxa Inc.
Address	FL.4, NO. 135. LANE 235, BAOQIAO RD. XINDIAN DIST., NEW TAIPEI CITY, TAIWAN

Date of Receipt	Feb. 27, 2019
Issued Date	Oct. 21, 2019
Report No.	1920271R-RFUSP29V00
Report Version	V1.0

Testing Laboratory
3023

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
This report must not be used to claim product endorsement by TAF or any agency of the government.

Test Report

Issued Date: Oct. 21, 2019
Report No.: 1920271R-RFUSP29V00

Product Name	Moxa 2.4/4.9/5 GHz
Applicant	Moxa Inc.
Address	FL.4, NO. 135. LANE 235, BAOQIAO RD. XINDIAN DIST., NEW TAIPEI CITY, TAIWAN
Manufacturer	Moxa Inc.
Model No.	WAPN008-1
FCC ID.	SLE-WAPN008-1
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	DC 24V
Trade Name	MOXA
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2017 ANSI C63.4: 2014, ANSI C63.10: 2013 789033 D02 General UNII Test Procedures New Rules v02
Test Result	Complied

Documented By : Anita Chou

(Senior Engineering Adm. Specialist / Anita Chou)

Tested By : Sam Hsu

(Engineer / Sam Hsu)

Approved By :

(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Moxa 2.4/4.9/5 GHz
Trade Name	MOXA
FCC ID.	SLE-WAPN008-1
Model No.	WAPN008-1
Frequency Range	5725-5850MHz
Center Frequency	5M-BW: 5730-5845MHz,20M-BW: 5740-5840MHz
Number of Channels	5M-BW:24 , 20M-BW: 11
Data Speed	5M-BW: 1.625-36.1Mbps, 20M-BW: 6.5-144.4Mbps
Type of Modulation	OFDM
Antenna Type	Dipole Antenna, Panel Antenna, Railway Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	MOXA	ANT-WDB-ANM-0306	Dipole	6.3dBi For 5GHz
2	MOXA	ANT-WDB-ARM-0202	Dipole	1.8dBi For 5GHz
3	MOXA	ANT-WDB-ARM-02	Dipole	0.81dBi For 5GHz
4	MOXA	ANT-WDB-ANM-0502	Dipole	2dBi For 5GHz
5	MOXA	ANT-WSB5-ANF-12	Dipole	12dBi For 5GHz
6	MOXA	ANT-WSB5-PNF-18	Panel	18dBi For 5GHz
7	MOXA	ANT-WDB-PNF-1518	Panel	18dBi For 5GHz
8	Huber+Suhner	1356.17.0042	Railway	13dBi For 5GHz
9	Huber+Suhner	1356.17.0077	Dipole	14dBi For 5GHz

Note:

1. Each antenna has been evaluated and only the worst case (higher gain antenna) is presented in the report.
2. The antenna of EUT conforms to FCC 15.203.
3. The Panel antenna is directional antenna.

5M-BW Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 182:	5730 MHz	Channel 183:	5735 MHz	Channel 184:	5740 MHz	Channel 185:	5745 MHz
Channel 186:	5750 MHz	Channel 187:	5755 MHz	Channel 188:	5760 MHz	Channel 189:	5765 MHz
Channel 190:	5770 MHz	Channel 191:	5775 MHz	Channel 192:	5780 MHz	Channel 193:	5785 MHz
Channel 194:	5790 MHz	Channel 195:	5795 MHz	Channel 196:	5800 MHz	Channel 197:	5805 MHz
Channel 198:	5810 MHz	Channel 199:	5815 MHz	Channel 200:	5820 MHz	Channel 201:	5825 MHz
Channel 202:	5830 MHz	Channel 203:	5835 MHz	Channel 204:	5840 MHz	Channel 205:	5845 MHz

20M-BW Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 184:	5740 MHz	Channel 186:	5750 MHz	Channel 188:	5760 MHz	Channel 190:	5770 MHz
Channel 192:	5780 MHz	Channel 194:	5790MHz	Channel 196:	5800 MHz	Channel 198:	5810 MHz
Channel 200:	5820 MHz	Channel 202:	5830MHz	Channel 204:	5840 MHz		

Note:

1. This device is a Moxa 2.4/4.9/5 GHz with a built-in 2.4GHz and 5.8GHz transceiver. this report for 5.8GHz transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (5M-BW is 3.25Mbps、20M-BW is 13Mbps)
4. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
5. The radiation measurements are performed in hight gain and different antenna type. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit - (OFDM-5BW) Mode 2: Transmit - (OFDM-20BW)

Summary of Test Item

Test Condition				Test Item				
				Conducted			Radiated Emission	
Antenna No.	Antenna Type	Antenna Gain (dBi)	Target Power (dBm)	Conducted Power	Power Density	Occupied Bandwidth	Radiated Emission	Band Edge
1	Dipole	6.3	29.70	✓				
2	Dipole	1.8	30.00	✓				
3	Dipole	0.81	30.00	✓	✓	✓		
4	Dipole	2	30.00	✓				
5	Dipole	12	24.00	✓				
6	Panel	18	30.00	✓				
7	Panel	18	30.00	✓	✓	✓	✓	✓
8	Railway	13	23.00	✓	✓	✓	✓	✓
9	Dipole	14	22.00	✓			✓	✓

Channel List

Bandwidth/ Channel no.	Center Frequency (MHz)			
	5MHz	Antenna NO.1-9	20MHz	Antenna NO.1-9
182	5730	V		
183	5735	V		
184	5740	V	5740	V
185	5745	V		
186	5750	V	5750	V
187	5755	V		
188	5760	V	5760	V
189	5765	V		
190	5770	V	5770	V
191	5775	V		
192	5780	V	5780	V
193	5785	V		
194	5790	V	5790	V
195	5795	V		
196	5800	V	5800	V
197	5805	V		
198	5810	V	5810	V
199	5815	V		
200	5820	V	5820	V
201	5825	V		
202	5830	V	5830	V
203	5835	V		
204	5840	V	5840	V
205	5845	V		

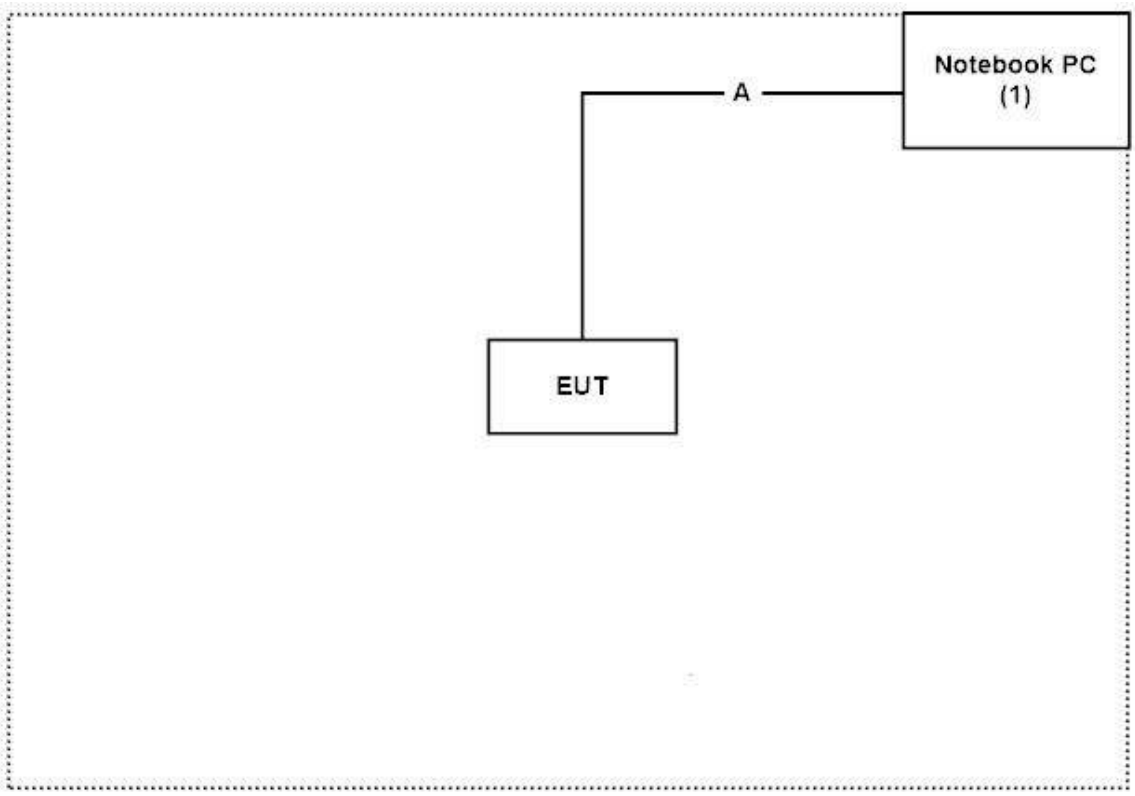
1.3. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
(1)	Notebook PC	DELL	Latitude 5580	2HRD7H2	Non-Shielded, 0.8m

Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 2m

1.4. Configuration of tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown on 1.4
(2) Execute “1.0 build.19030514” program on the Notebook PC.
(3) Configure the test mode, the test channel, and the data rate.
(4) Start the continuous transmission.
(5) Verify that the EUT works properly.

1.6. Test Facility

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

USA : FCC Registration Number: TW3023

Canada : IC Registration Number: 4075A

Site Description: Accredited by TAF
Accredited Number: 3023

Test Laboratory: DEKRA Testing and Certification Co., Ltd
Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
Phone number: 886-2-8601-3788
Fax number: 886-2-8601-3789
Email address: info.tw@dekra.com
Website: http://www.dekra.com.tw

1.7. List of Test Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2019/02/26	2020/02/25
X	Spectrum Analyzer	Agilent	N9010A	MY52220597	2019/10/11	2020/10/10
X	Peak Power Analyzer	Keysight	8990B	MY51000410	2019/08/01	2020/07/31
X	Wideband Power Sensor	Keysight	N1923A	MY56080003	2019/07/25	2020/07/24
X	Wideband Power Sensor	Keysight	N1923A	MY56080004	2019/07/25	2020/07/24
	EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19	2019/11/18
	LISN	R&S	ENV216	101105	2019/03/30	2020/03/29
	LISN	R&S	ESH3-Z5	836679/014	2019/04/02	2020/04/01
	Coaxial Cable	DEKRA	RG 400	LC018-RG	2019/06/21	2020/06/20

For Radiated measurements /Site3/CB8

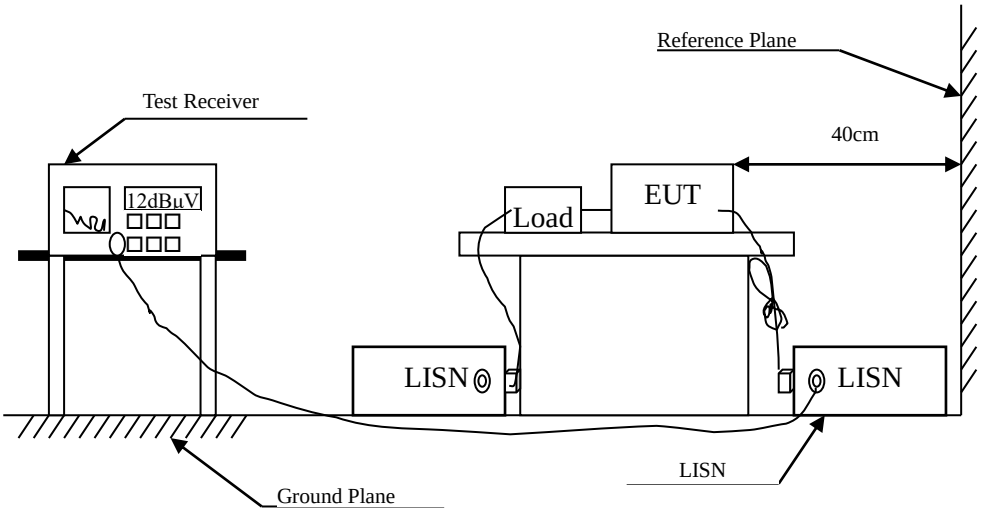
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
X	Spectrum Analyzer	R&S	FSP40	100170	2019/03/11	2020/03/10
X	Loop Antenna	Teseq	HLA6121	37133	2018/10/13	2020/10/12
X	Bilog Antenna	Schaffner Chase	CBL6112B	2707	2019/06/24	2020/06/23
X	Coaxial Cable	DEKRA	RG 214	LC003-RG	2019/06/14	2020/06/13
X	Pre-Amplifier	Jet-Power	JPA-10M1G33	170101000330010	2019/06/14	2020/06/13
X	Horn Antenna	ETS-Lindgren	3117	00135205	2019/05/03	2020/05/02
X	Horn Antenna	SCHWARZBECK	9120D	576	2018/12/18	2019/12/17
X	Pre-Amplifier	EMCI	EMC012630SE	980210	2019/04/10	2020/04/09
X	Horn Antenna	Com-Power	AH-840	101043	2019/01/09	2020/01/08
X	Amplifier + Cable	EMCI	EMC184045SE	980370	2019/03/21	2020/03/20
X	Filter	MICRO-TRONICS	BRM50702	G270	2019/08/06	2020/08/05
X	Filter	MICRO-TRONICS	BRM50716	G196	2019/08/06	2020/08/05

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version :QuieTek EMI 2.0 V2.1.113.

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.
The EUT was setup to ANSI C63.4, 2014; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

2.4. Uncertainty

± 2.26 dB

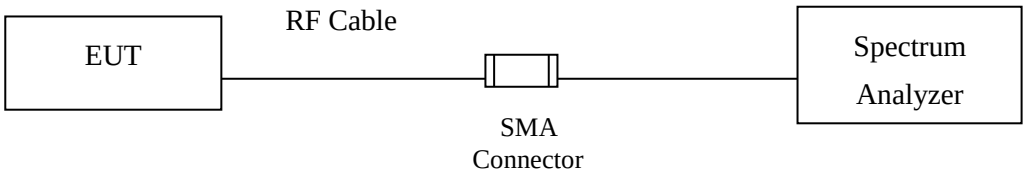
2.5. Test Result of Conducted Emission

Owing to the DC operation of EUT, this test item is not performed.

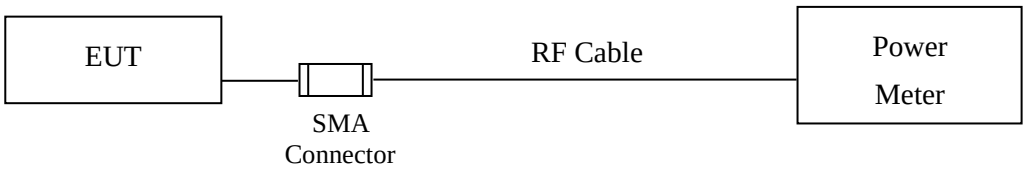
3. Maximun conducted output power

3.1. Test Setup

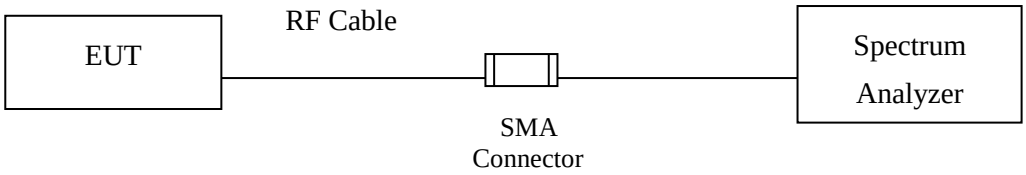
99% Occupied Bandwidth



Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac)



3.2. Limits

3.2.1. For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.3. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW≦40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)
Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

3.4. Uncertainty

± 1.62 dB

3.5. Test Result of Maximum conducted output power

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.1)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	13.65	--	--	--	--	--	--	--	<29.7dBm
193	5785	16.83	16.76	16.67	16.55	16.45	16.33	16.26	16.19	<29.7dBm
205	5845	13.22	--	--	--	--	--	--	--	<29.7dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	13.11	--	--	--	--	--	--	--	<29.7dBm
193	5785	17.19	17.06	16.97	16.89	16.78	16.70	16.62	16.49	<29.7dBm
205	5845	12.42	--	--	--	--	--	--	--	<29.7dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	13.65	13.11	16.40	29.7	--
193	5785	--	16.83	17.19	20.02	29.7	--
205	5845	--	13.22	12.42	15.85	29.7	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.1)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.01	--	--	--	--	--	--	--	<29.7dBm
192	5780	17.3	17.22	17.11	16.97	16.85	16.72	16.63	16.52	<29.7dBm
204	5840	15.42	--	--	--	--	--	--	--	<29.7dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.56	--	--	--	--	--	--	--	<29.7dBm
192	5780	17.73	17.61	17.5	17.43	17.36	17.25	17.12	17.03	<29.7dBm
204	5840	14.77	--	--	--	--	--	--	--	<29.7dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	16.01	16.56	19.30	29.7	--
192	5780	--	17.30	17.73	20.53	29.7	--
204	5840	--	15.42	14.77	18.12	29.7	--

Note:

4. Power Output Value =Reading value on average power meter + cable loss
5. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
6. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.2)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	16.67	--	--	--	--	--	--	--	<30dBm
193	5785	16.81	16.73	16.65	16.55	16.48	16.35	16.27	16.16	<30dBm
205	5845	13.36	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	17.11	--	--	--	--	--	--	--	<30dBm
193	5785	17.17	17.03	16.93	16.80	16.69	16.56	16.46	16.38	<30dBm
205	5845	12.4	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	16.67	17.11	19.91	30	--
193	5785	--	16.81	17.17	20.00	30	--
205	5845	--	13.36	12.40	15.92	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.2)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	15.99	--	--	--	--	--	--	--	<30dBm
192	5780	17.25	17.15	17.03	16.91	16.82	16.74	16.67	16.53	<30dBm
204	5840	15.39	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.51	--	--	--	--	--	--	--	<30dBm
192	5780	17.75	17.64	17.55	17.48	17.37	17.23	17.09	16.97	<30dBm
204	5840	14.78	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	15.99	16.51	19.27	30	--
192	5780	--	17.25	17.75	20.52	30	--
204	5840	--	15.39	14.78	18.11	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.3)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	16.69	--	--	--	--	--	--	--	<30dBm
193	5785	16.8	16.7	16.62	16.53	16.4	16.33	16.26	16.18	<30dBm
205	5845	13.25	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	17.17	--	--	--	--	--	--	--	<30dBm
193	5785	17.17	17.1	17.02	16.94	16.80	16.73	16.65	16.51	<30dBm
205	5845	12.41	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	16.69	17.17	19.95	30	--
193	5785	--	16.80	17.17	20.00	30	--
205	5845	--	13.25	12.41	15.86	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.3)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.07	--	--	--	--	--	--	--	<30dBm
192	5780	17.25	17.14	17	16.91	16.81	16.69	16.56	16.49	<30dBm
204	5840	15.45	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.5	--	--	--	--	--	--	--	<30dBm
192	5780	17.73	17.66	17.58	17.49	17.41	17.32	17.23	17.09	<30dBm
204	5840	14.75	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	16.07	16.50	19.30	30	--
192	5780	--	17.25	17.73	20.51	30	--
204	5840	--	15.45	14.75	18.12	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.4)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	16.71	--	--	--	--	--	--	--	<30dBm
193	5785	16.77	16.66	16.57	16.47	16.34	16.27	16.19	16.07	<30dBm
205	5845	13.29	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	17.14	--	--	--	--	--	--	--	<30dBm
193	5785	17.18	17.07	16.93	16.86	16.72	16.63	16.52	16.39	<30dBm
205	5845	12.38	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	16.71	17.14	19.94	30	--
193	5785	--	16.77	17.18	19.99	30	--
205	5845	--	13.29	12.38	15.87	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.4)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.01	--	--	--	--	--	--	--	<30dBm
192	5780	17.27	17.18	17.09	16.95	16.88	16.79	16.72	16.63	<30dBm
204	5840	15.44	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	16.51	--	--	--	--	--	--	--	<30dBm
192	5780	17.67	17.56	17.47	17.33	17.25	17.13	17.03	16.94	<30dBm
204	5840	14.77	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	16.01	16.51	19.28	30	--
192	5780	--	17.27	17.67	20.48	30	--
204	5840	--	15.44	14.77	18.13	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.5)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	8.35	--	--	--	--	--	--	--	<24dBm
193	5785	16.77	16.66	16.57	16.45	16.31	16.22	16.09	15.95	<24dBm
205	5845	13.38	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	7.76	--	--	--	--	--	--	--	<24dBm
193	5785	17.18	17.04	16.96	16.82	16.75	16.67	16.58	16.46	<24dBm
205	5845	12.52	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	8.35	7.76	11.08	24	--
193	5785	--	16.77	17.18	19.99	24	--
205	5845	--	13.38	12.52	15.98	24	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.5)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.17	--	--	--	--	--	--	--	<24dBm
192	5780	17.27	17.17	17.03	16.91	16.82	16.71	16.64	16.53	<24dBm
204	5840	12.53	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.39	--	--	--	--	--	--	--	<24dBm
192	5780	17.67	17.6	17.52	17.42	17.35	17.24	17.17	17.07	<24dBm
204	5840	11.89	--	--	--	--	--	--	--	<24dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	12.17	12.39	15.29	24	--
192	5780	--	17.27	17.67	20.48	24	--
204	5840	--	12.53	11.89	15.23	24	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.6)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	7.22	--	--	--	--	--	--	--	<30dBm
193	5785	16.66	16.52	16.38	16.29	16.18	16.09	15.99	15.86	<30dBm
205	5845	13.32	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	6.41	--	--	--	--	--	--	--	<30dBm
193	5785	17.05	16.93	16.79	16.68	16.55	16.41	16.31	16.20	<30dBm
205	5845	12.45	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	7.22	6.41	9.84	30	--
193	5785	--	16.66	17.05	19.87	30	--
205	5845	--	13.32	12.45	15.92	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.
4. Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.6)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	11.98	--	--	--	--	--	--	--	<30dBm
192	5780	17.29	17.21	17.11	17.04	16.91	16.84	16.75	16.67	<30dBm
204	5840	15.42	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.29	--	--	--	--	--	--	--	<30dBm
192	5780	17.69	17.56	17.47	17.35	17.25	17.14	17.00	16.89	<30dBm
204	5840	14.76	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	11.98	12.29	15.15	30	--
192	5780	--	17.29	17.69	20.50	30	--
204	5840	--	15.42	14.76	18.11	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.
4. Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.7)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	7.27	--	--	--	--	--	--	--	<30dBm
193	5785	16.73	16.6	16.51	16.4	16.27	16.19	16.05	15.92	<30dBm
205	5845	13.44	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	6.48	--	--	--	--	--	--	--	<30dBm
193	5785	17.18	17.05	16.96	16.88	16.76	16.68	16.54	16.44	<30dBm
205	5845	12.51	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	7.27	6.48	9.90	30	--
193	5785	--	16.73	17.18	19.97	30	--
205	5845	--	13.44	12.51	16.01	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.
4. Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.7)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.05	--	--	--	--	--	--	--	<30dBm
192	5780	17.26	17.17	17.09	17	16.89	16.8	16.68	16.54	<30dBm
204	5840	15.41	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.37	--	--	--	--	--	--	--	<30dBm
192	5780	17.78	17.71	17.58	17.47	17.34	17.21	17.10	17.00	<30dBm
204	5840	14.89	--	--	--	--	--	--	--	<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	12.05	12.37	15.22	30	--
192	5780	--	17.26	17.78	20.54	30	--
204	5840	--	15.41	14.89	18.17	30	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.
4. Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.8)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	10.42	--	--	--	--	--	--	--	<23dBm
193	5785	16.69	16.55	16.47	16.4	16.27	16.15	16.04	15.96	<23dBm
205	5845	12.86	--	--	--	--	--	--	--	<23dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	10.11	--	--	--	--	--	--	--	<23dBm
193	5785	17.09	17	16.88	16.78	16.70	16.61	16.47	16.36	<23dBm
205	5845	11.57	--	--	--	--	--	--	--	<23dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	10.42	10.11	13.28	23	--
193	5785	--	16.69	17.09	19.90	23	--
205	5845	--	12.86	11.57	15.27	23	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.8)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.05	--	--	--	--	--	--	--	<23dBm
192	5780	17.22	17.08	16.97	16.87	16.78	16.71	16.6	16.48	<23dBm
204	5840	12.47	--	--	--	--	--	--	--	<23dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	12.55	--	--	--	--	--	--	--	<23dBm
192	5780	17.63	17.49	17.38	17.28	17.15	17.07	16.97	16.83	<23dBm
204	5840	11.83	--	--	--	--	--	--	--	<23dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	12.05	12.55	15.32	23	--
192	5780	--	17.22	17.63	20.44	23	--
204	5840	--	12.47	11.83	15.17	23	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.9)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	7.36	--	--	--	--	--	--	--	<22dBm
193	5785	16.89	16.79	16.71	16.59	16.49	16.42	16.34	16.21	<22dBm
205	5845	11.61	--	--	--	--	--	--	--	<22dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
182	5730	6.57	--	--	--	--	--	--	--	<22dBm
193	5785	17.11	17.02	16.95	16.81	16.71	16.62	16.51	16.43	<22dBm
205	5845	10.61	--	--	--	--	--	--	--	<22dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
182	5730	--	7.36	6.57	9.99	22	--
193	5785	--	16.89	17.11	20.01	22	--
205	5845	--	11.61	10.61	14.15	22	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.9)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	11.2	--	--	--	--	--	--	--	<22dBm
192	5780	17.24	17.11	16.99	16.9	16.83	16.75	16.63	16.54	<22dBm
204	5840	11.51	--	--	--	--	--	--	--	<22dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

CHAIN B

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		Mcs8	Mcs9	Mcs10	Mcs11	Mcs12	Mcs13	Mcs14	Mcs15	
		Measurement Level (dBm)								
184	5740	11.5	--	--	--	--	--	--	--	<22dBm
192	5780	17.68	17.57	17.47	17.39	17.27	17.19	17.06	16.94	<22dBm
204	5840	10.82	--	--	--	--	--	--	--	<22dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:
(CHAIN A+ B)

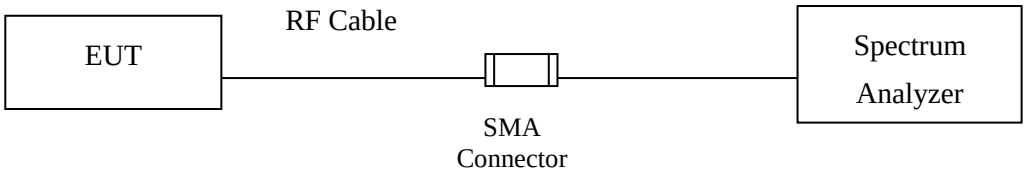
Channel Number	Frequency (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
184	5740	--	11.20	11.50	14.36	22	--
192	5780	--	17.24	17.68	20.48	22	--
204	5840	--	11.51	10.82	14.19	22	--

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
3. 26 dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

4. Peak Power Spectral Density

4.1. Test Setup



4.2. Limits

(1) For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (500 kHz/100 kHz) = 6.98 dB.

4.4. Uncertainty

± 1.62 dB

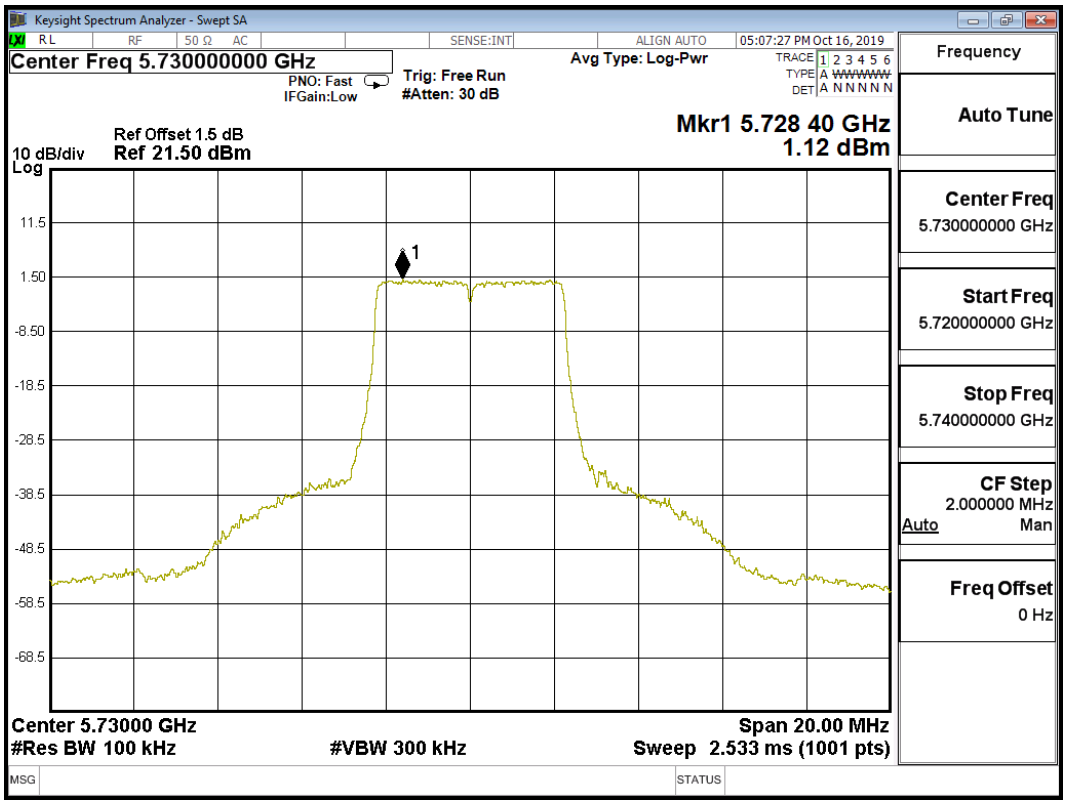
4.5. Test Result of Peak Power Spectral Density

Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.3)

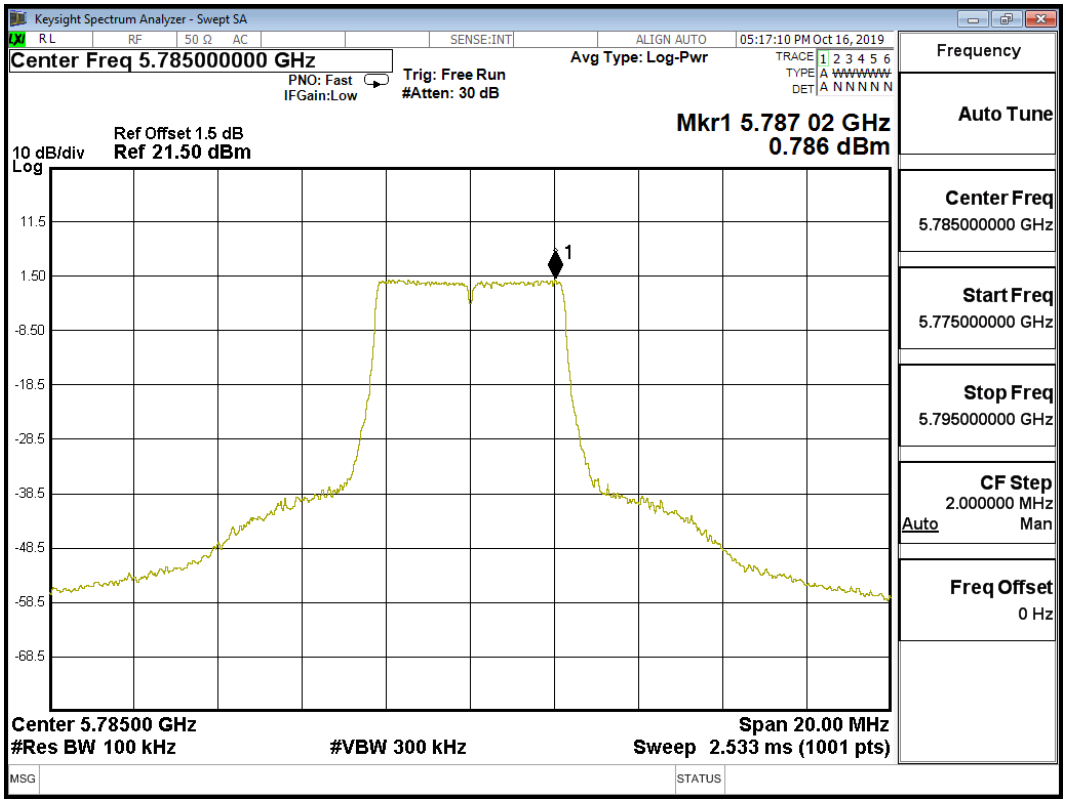
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
182	5730	A	1.120	6.980	11.110	<30	Pass
		B	0.286	6.980	10.276	<30	Pass
193	5785	A	0.786	6.980	10.776	<30	Pass
		B	-0.410	6.980	9.580	<30	Pass
205	5845	A	-3.170	6.980	6.820	<30	Pass
		B	-4.424	6.980	5.566	<30	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

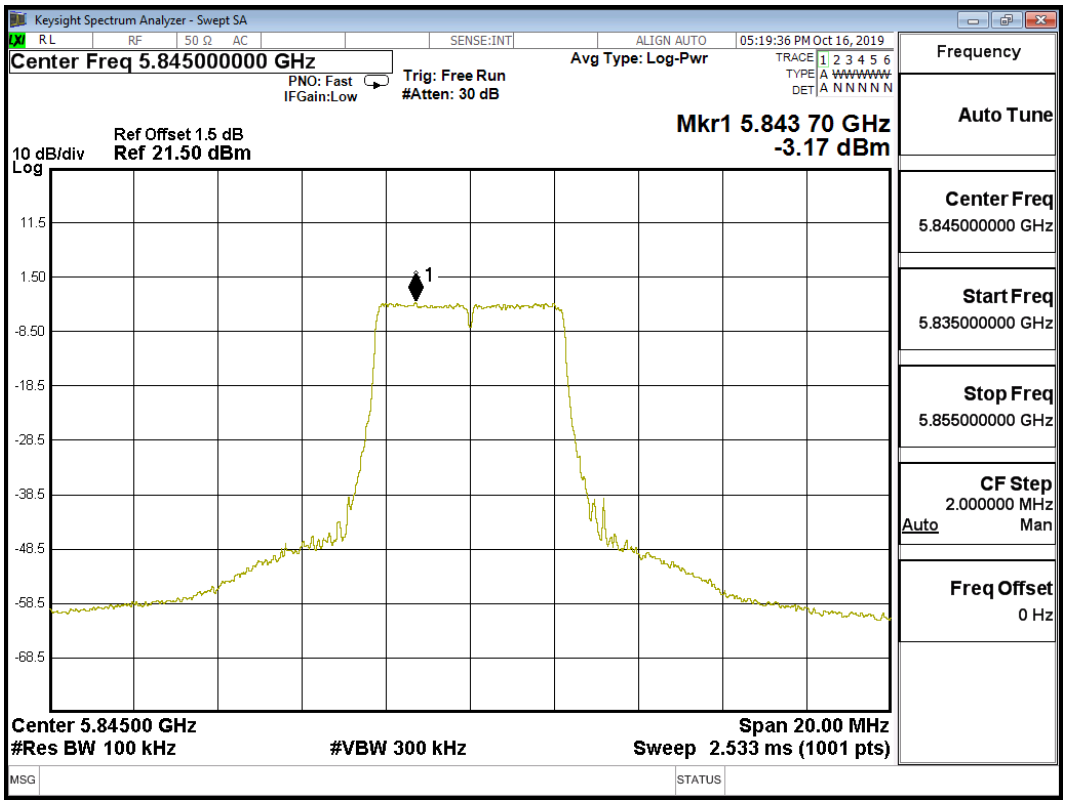
Channel 182 – Chain A



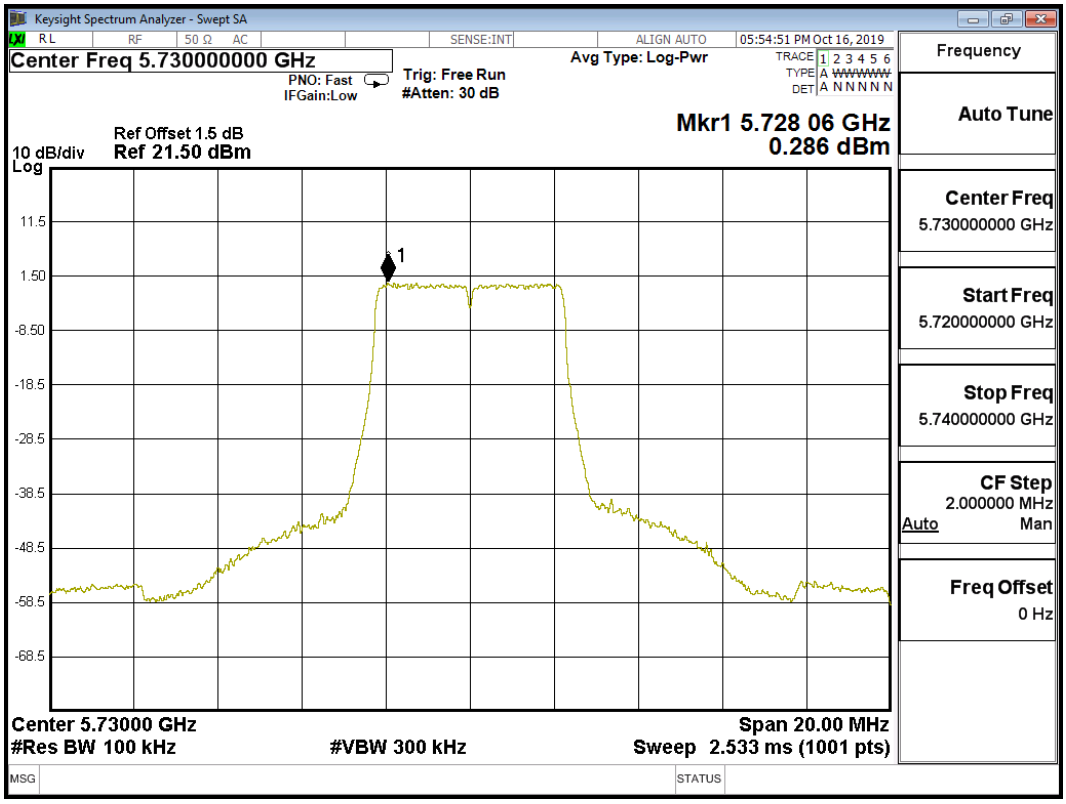
Channel 193 – Chain A



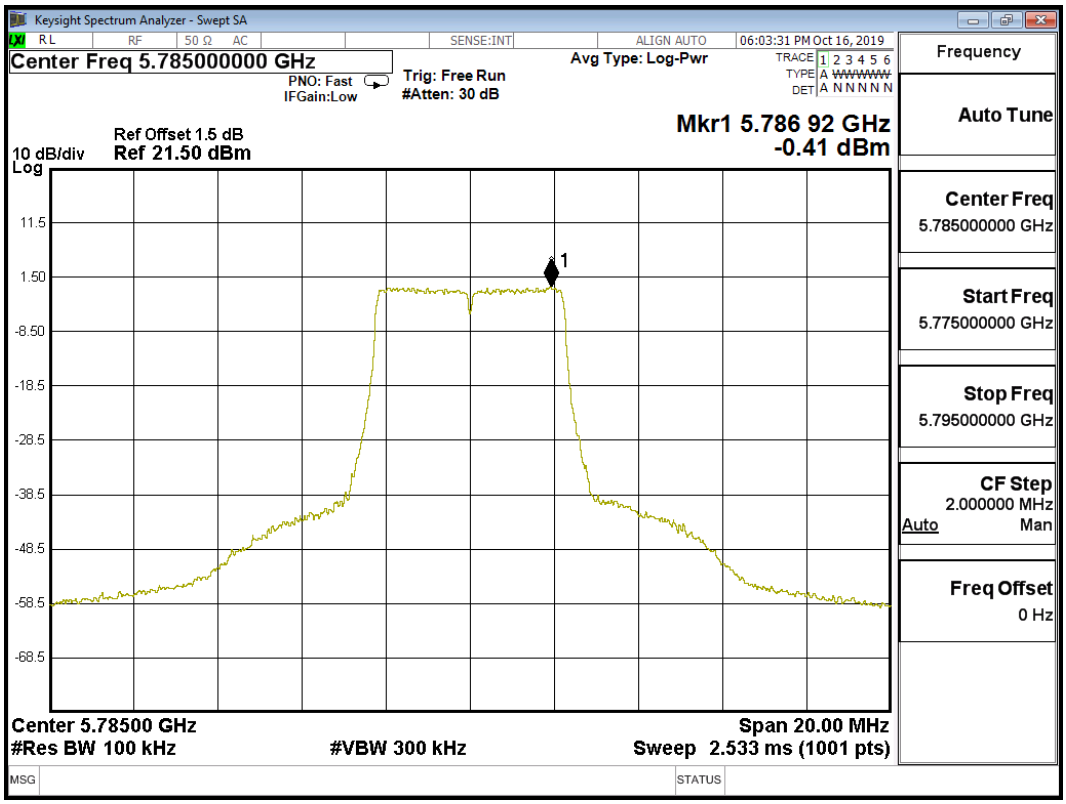
Channel 205 – Chain A



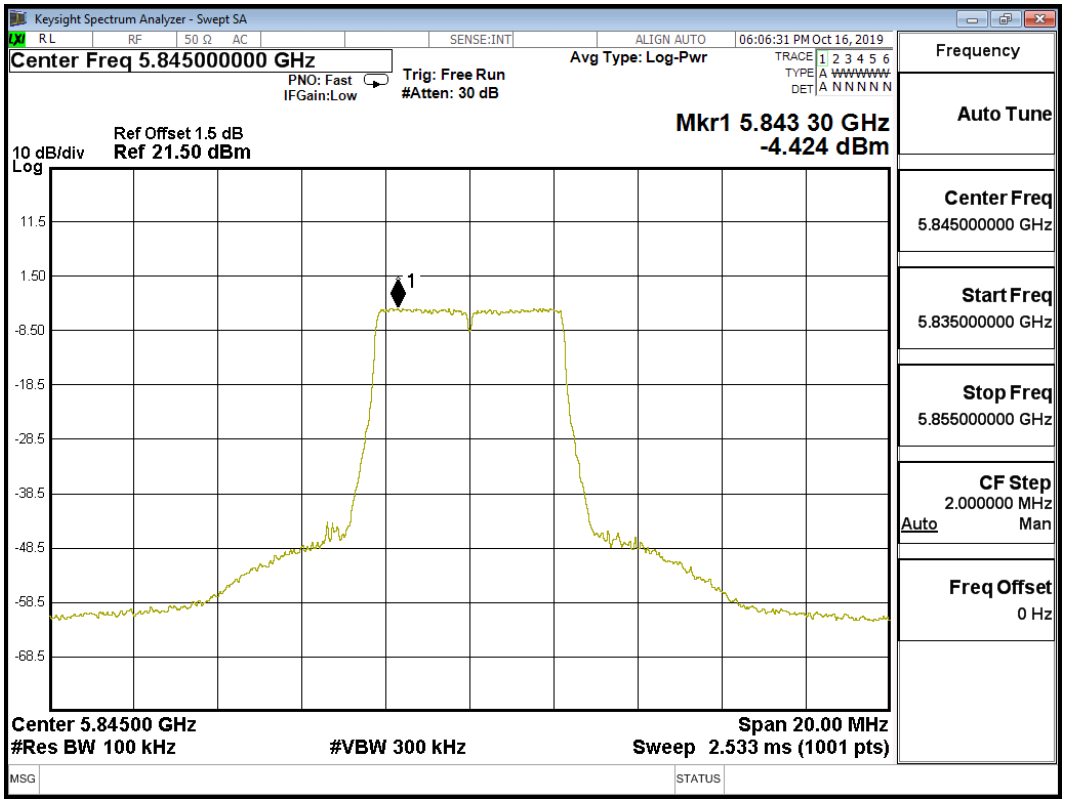
Channel 182 – Chain B



Channel 193 – Chain B



Channel 205 – Chain B

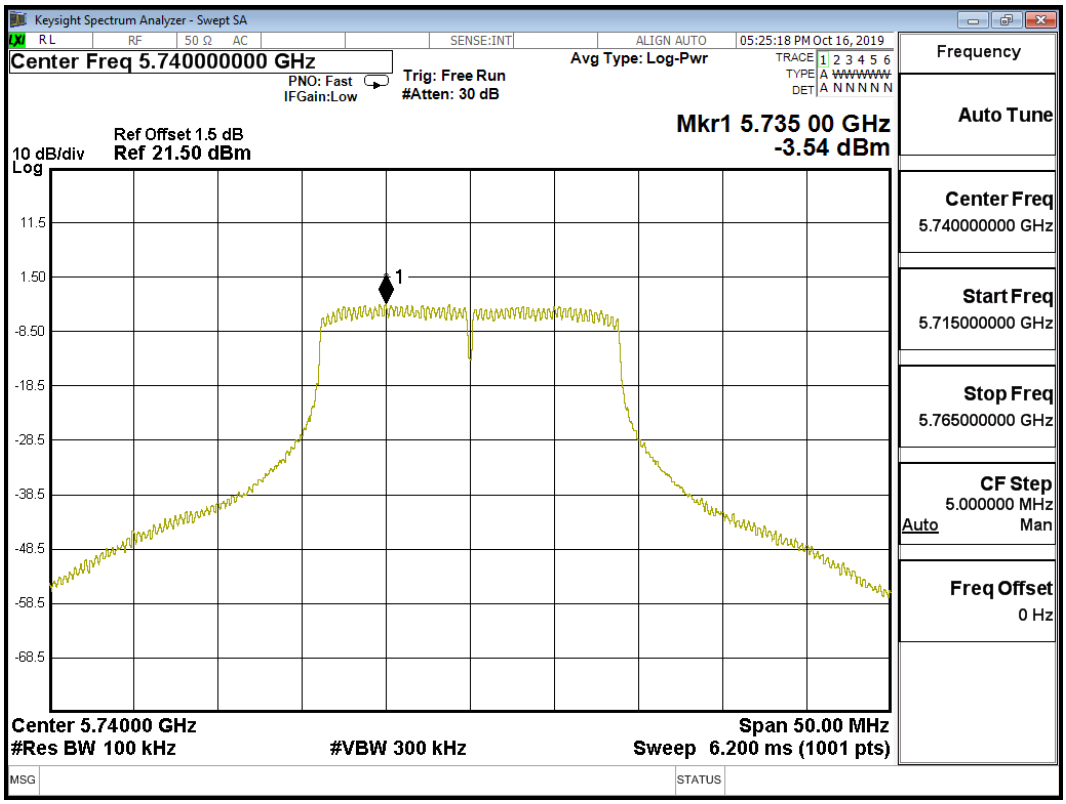


Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.3)

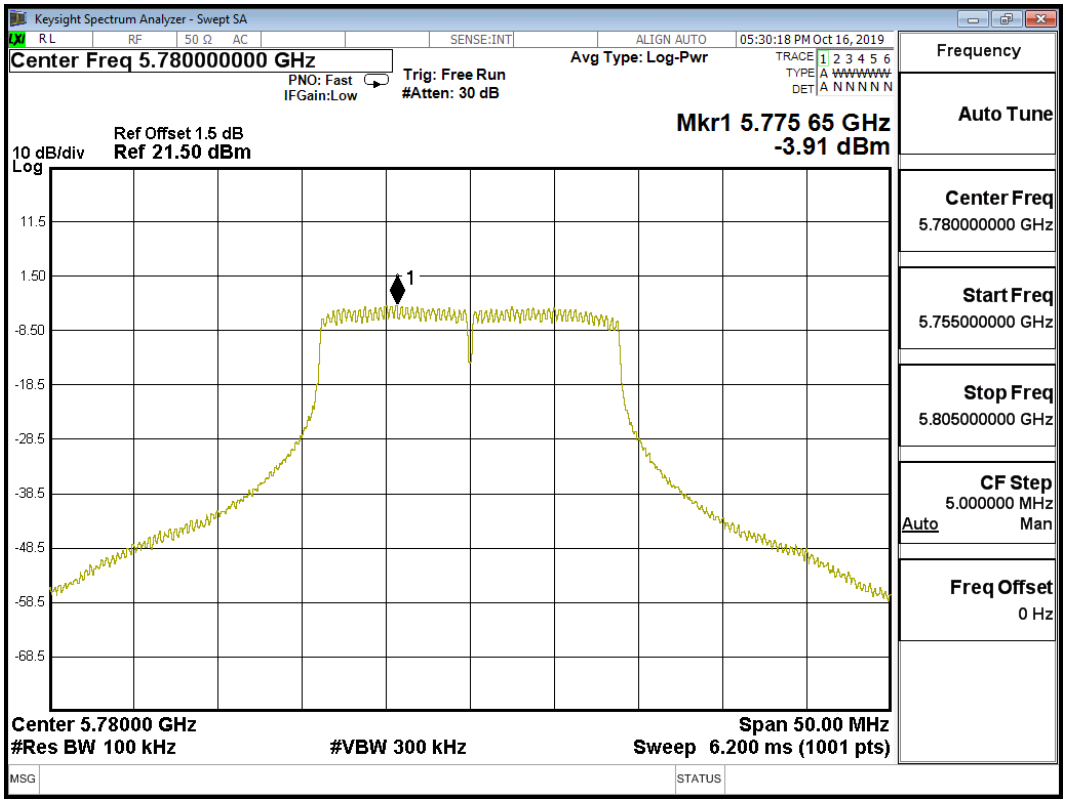
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
184	5740	A	-3.540	6.980	6.450	<30	Pass
		B	-5.240	6.980	4.750	<30	Pass
192	5780	A	-3.910	6.980	6.080	<30	Pass
		B	-5.123	6.980	4.867	<30	Pass
204	5840	A	-6.893	6.980	3.097	<30	Pass
		B	-8.130	6.980	1.860	<30	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

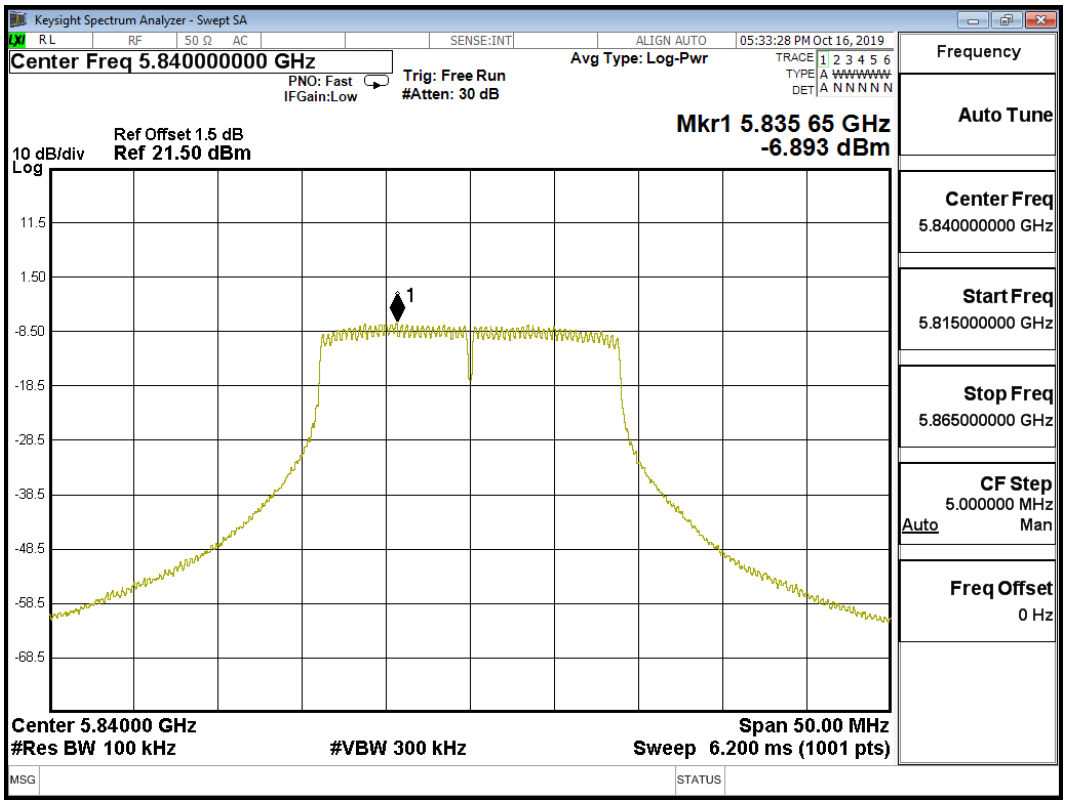
Channel 184 – Chain A



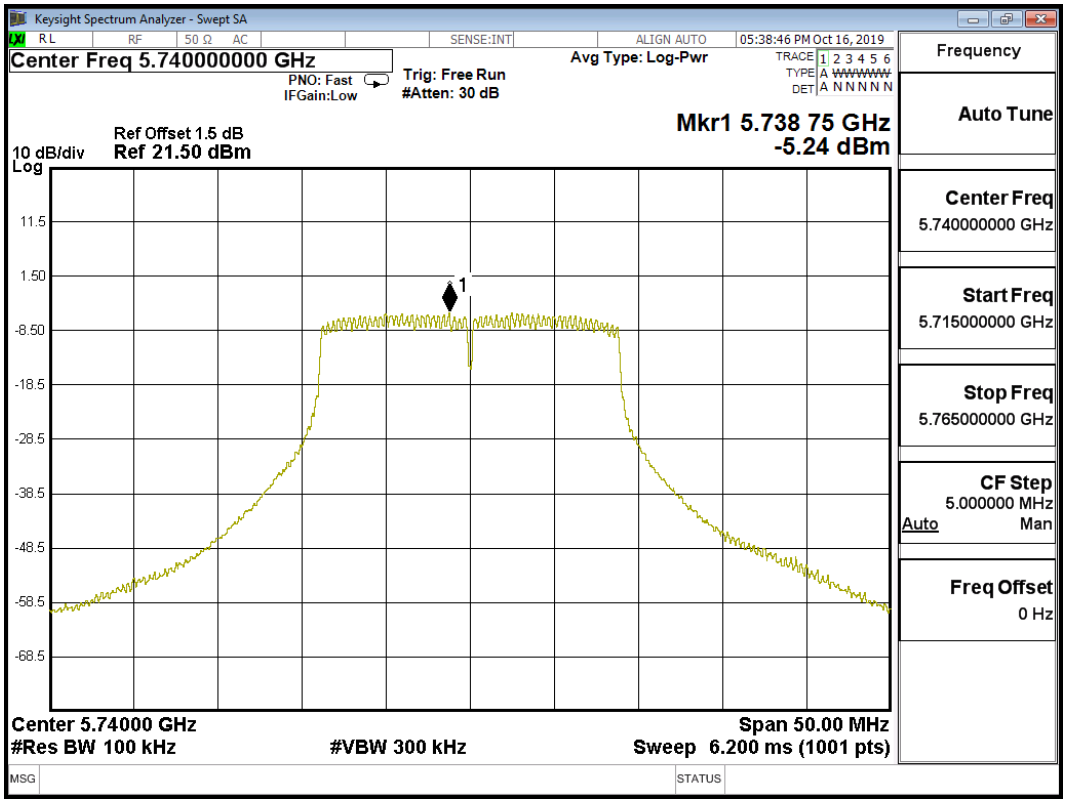
Channel 192 – Chain A



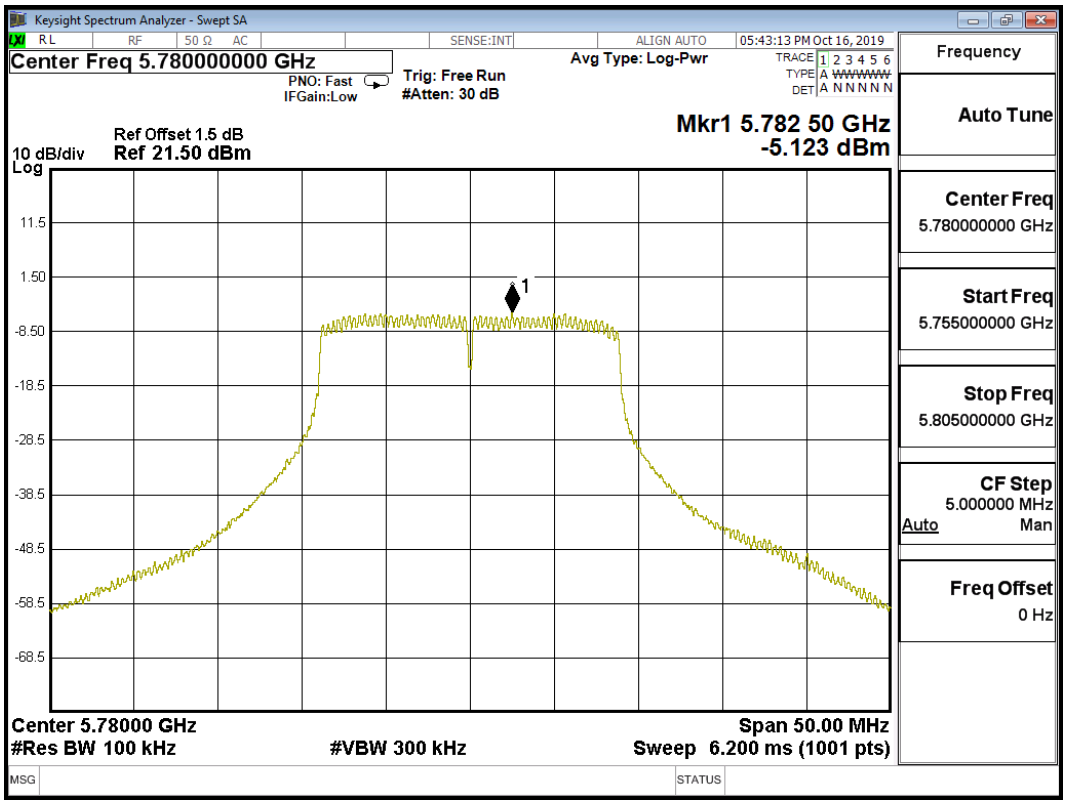
Channel 204 – Chain A



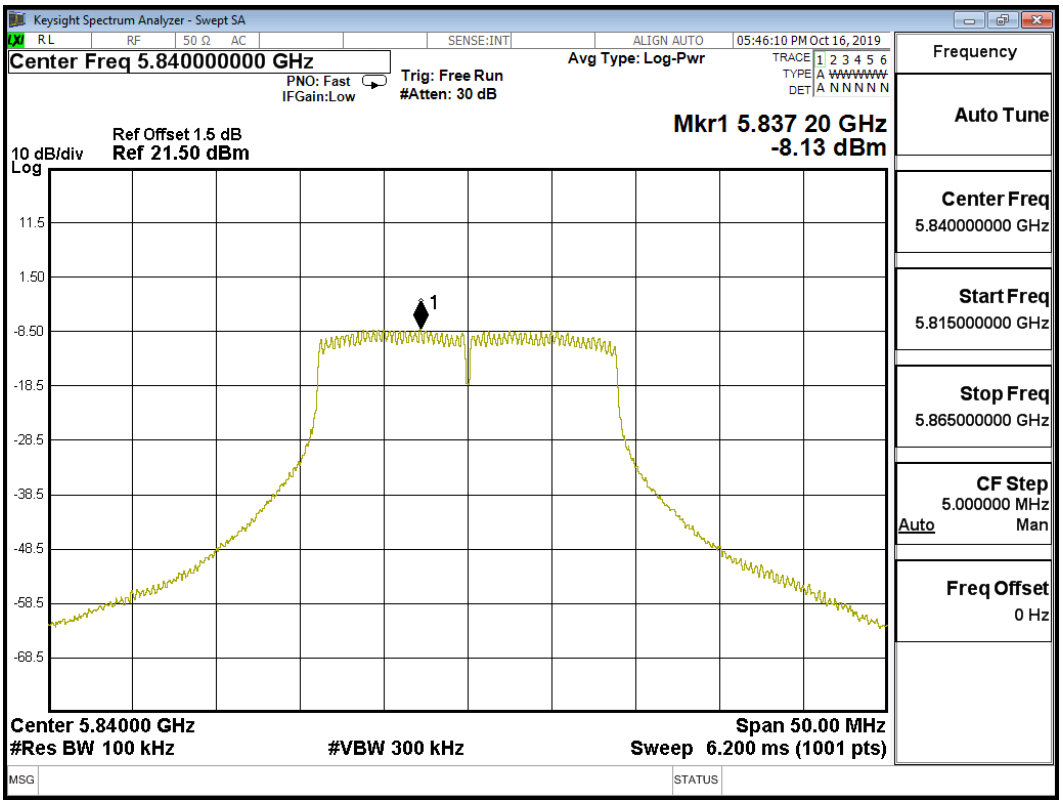
Channel 184 – Chain B



Channel 192 – Chain B



Channel 204 – Chain B

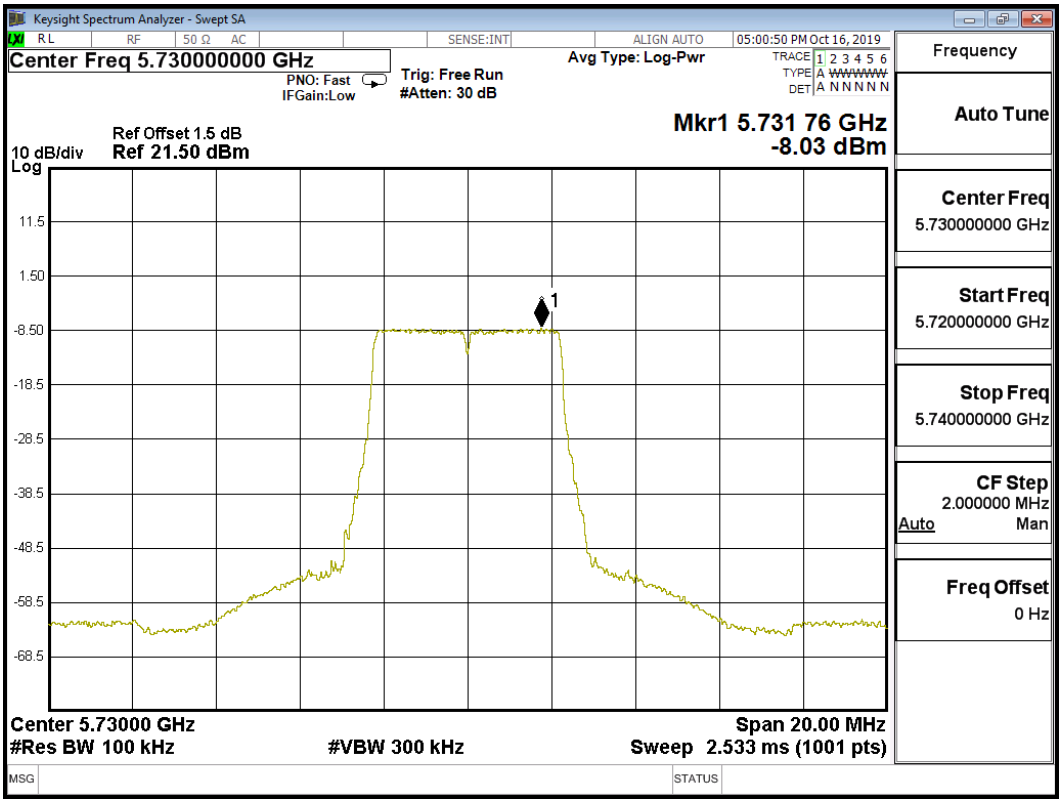


Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.7)

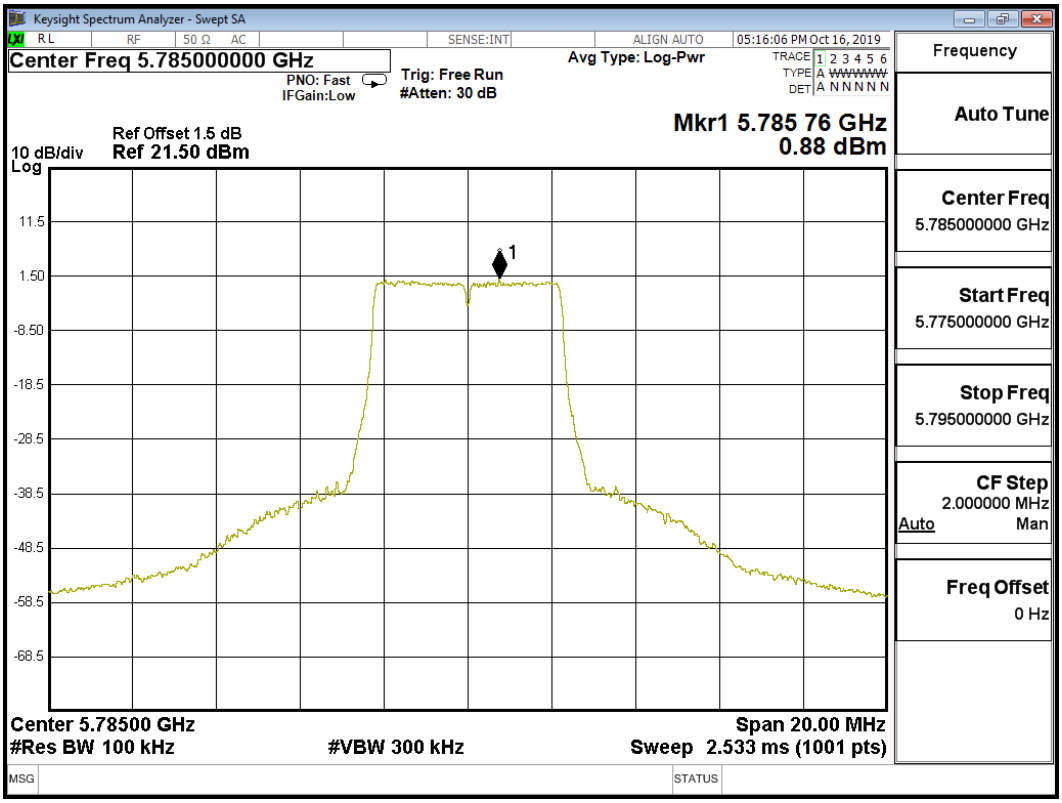
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
182	5730	A	-8.030	6.980	1.960	<30	Pass
		B	-10.140	6.980	-0.150	<30	Pass
193	5785	A	0.880	6.980	10.870	<30	Pass
		B	-0.230	6.980	9.760	<30	Pass
205	5845	A	-3.230	6.980	6.760	<30	Pass
		B	-4.510	6.980	5.480	<30	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

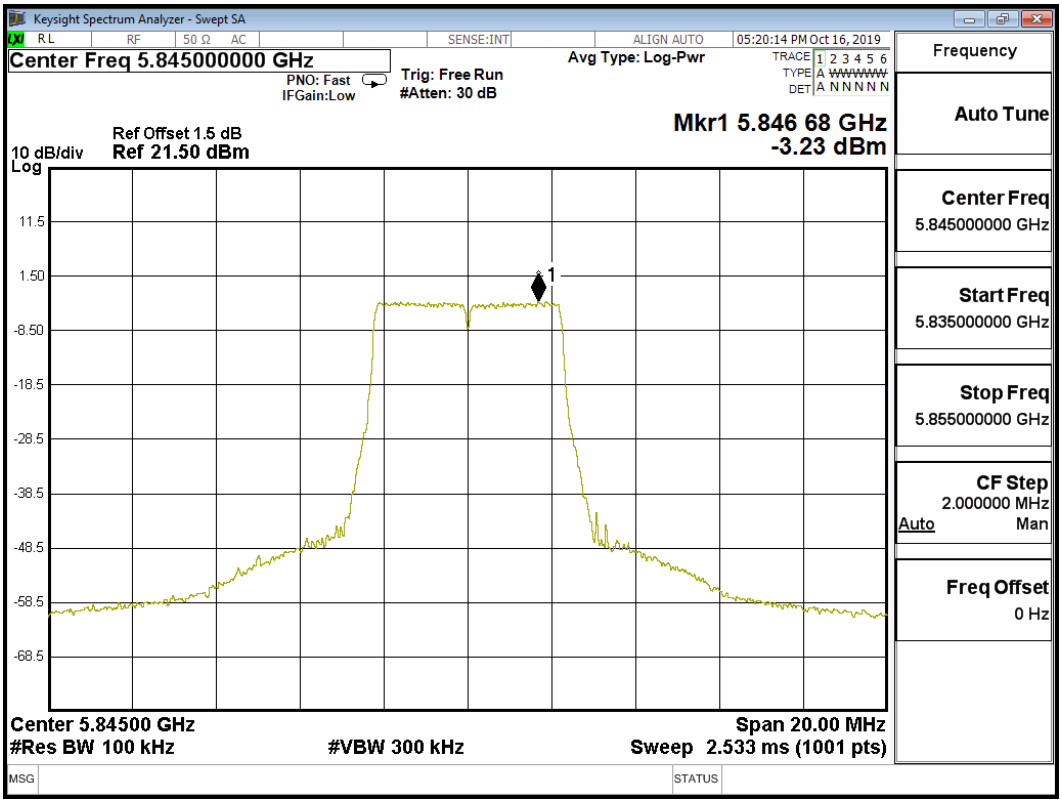
Channel 182 – Chain A



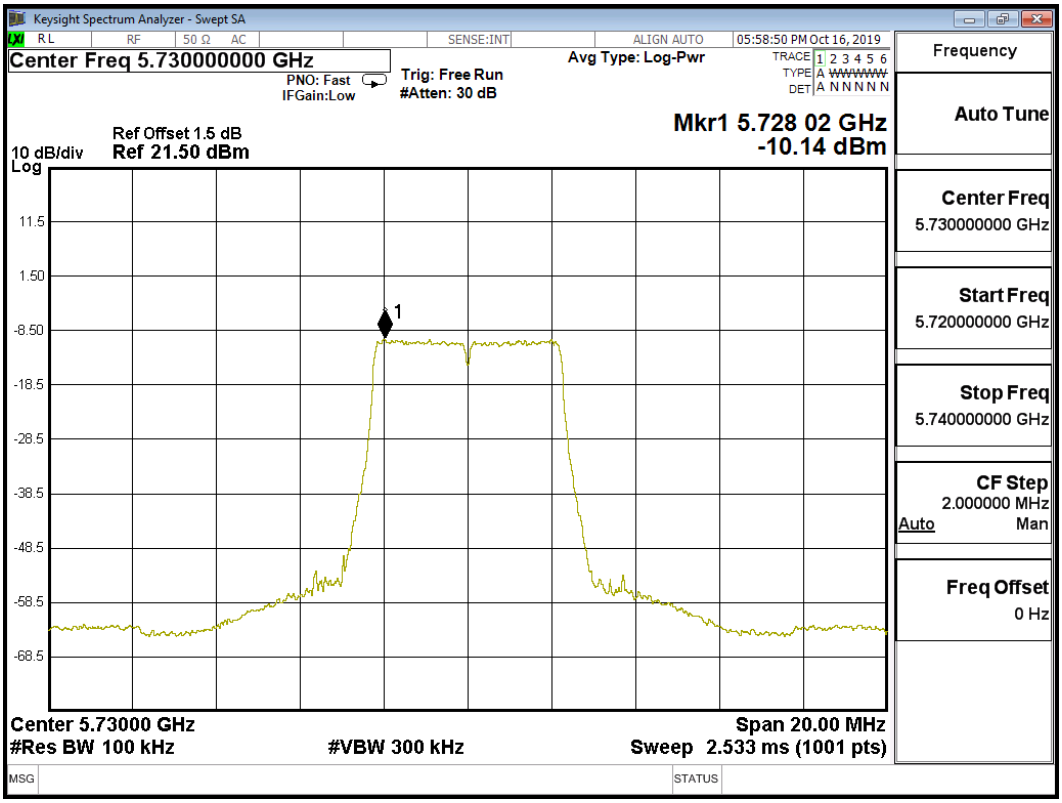
Channel 193 – Chain A



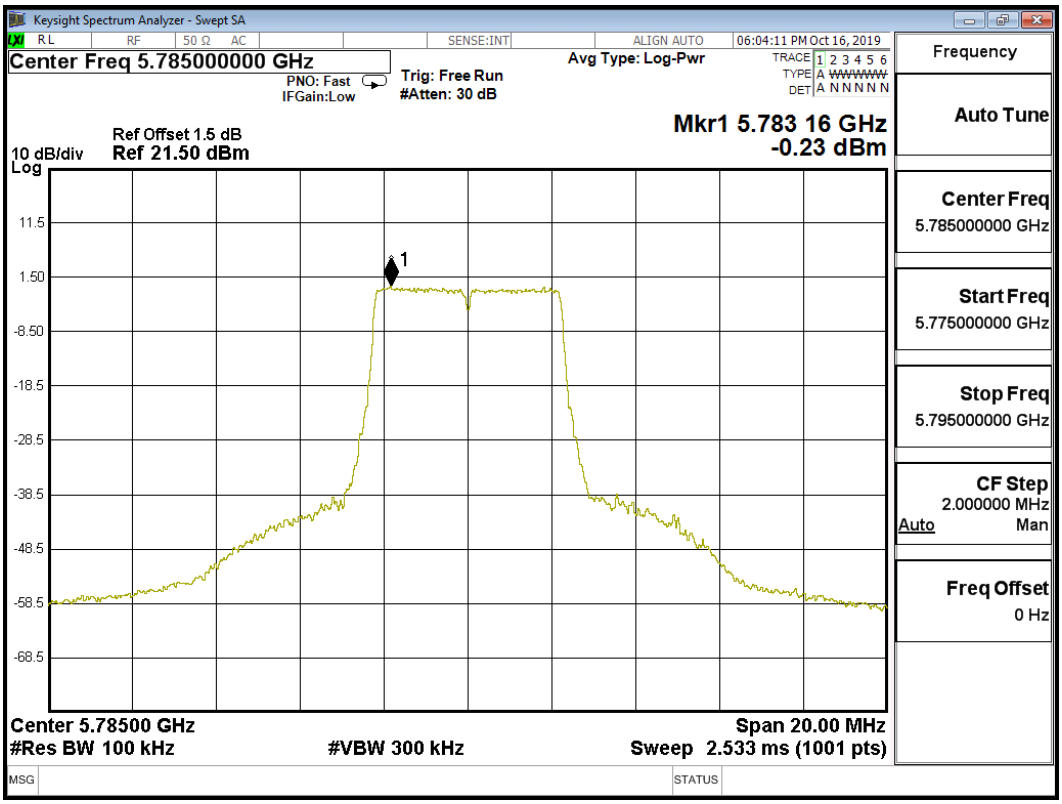
Channel 205 – Chain A



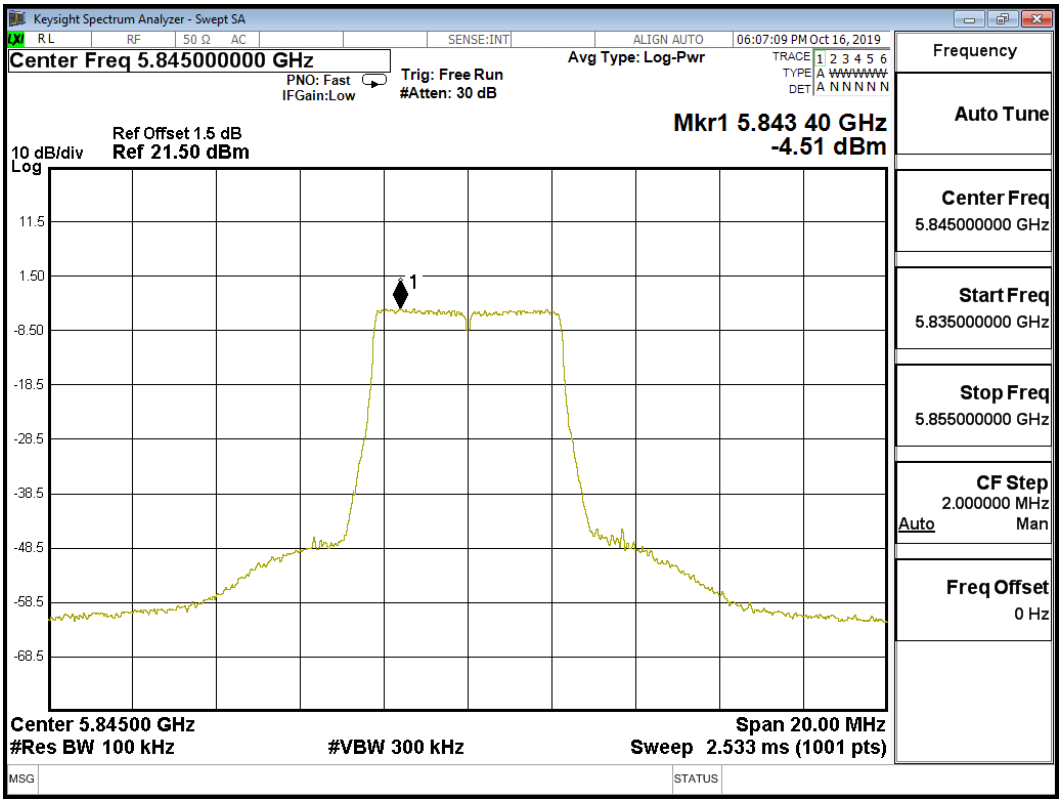
Channel 182 – Chain B



Channel 193 – Chain B



Channel 205 – Chain B

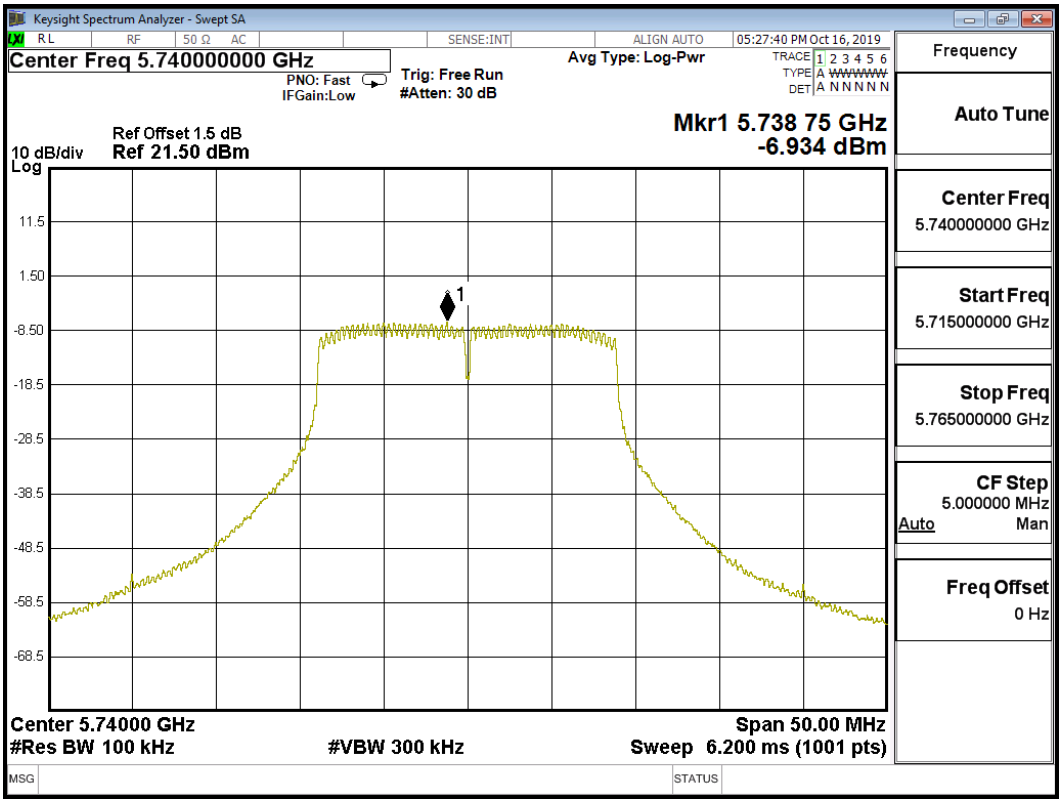


Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.7)

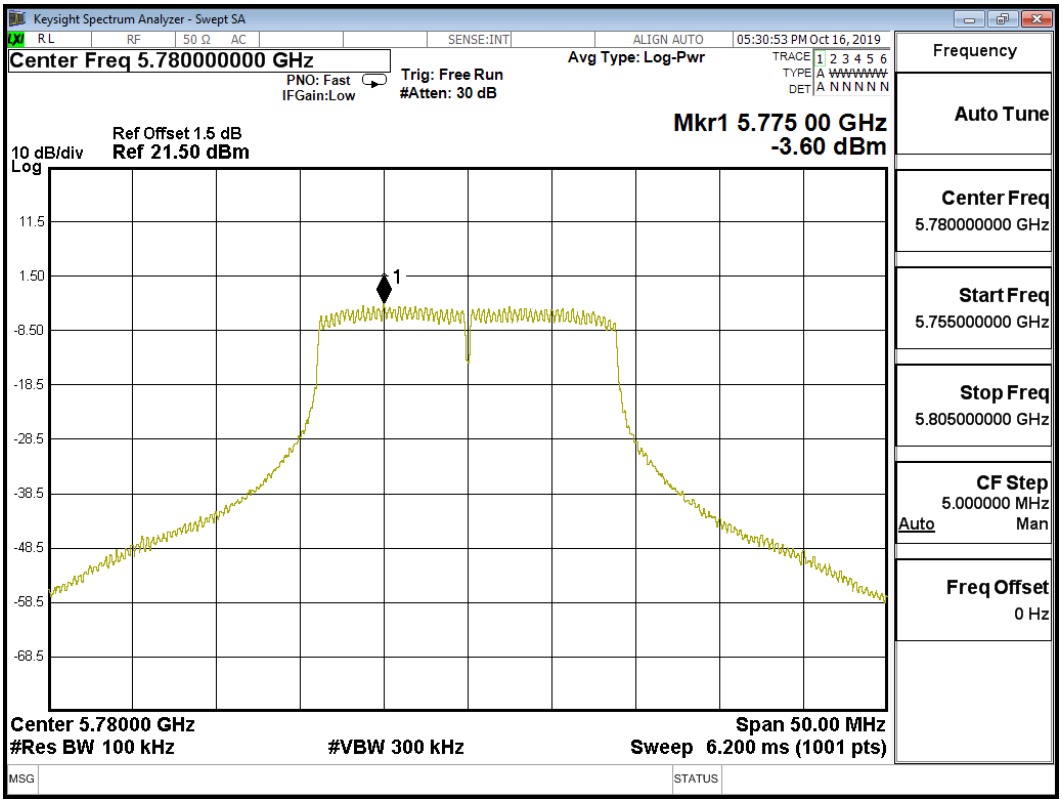
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
184	5740	A	-6.934	6.980	3.056	<30	Pass
		B	-9.030	6.980	0.960	<30	Pass
192	5780	A	-3.600	6.980	6.390	<30	Pass
		B	-5.047	6.980	4.943	<30	Pass
204	5840	A	-7.016	6.980	2.974	<30	Pass
		B	-8.370	6.980	1.620	<30	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

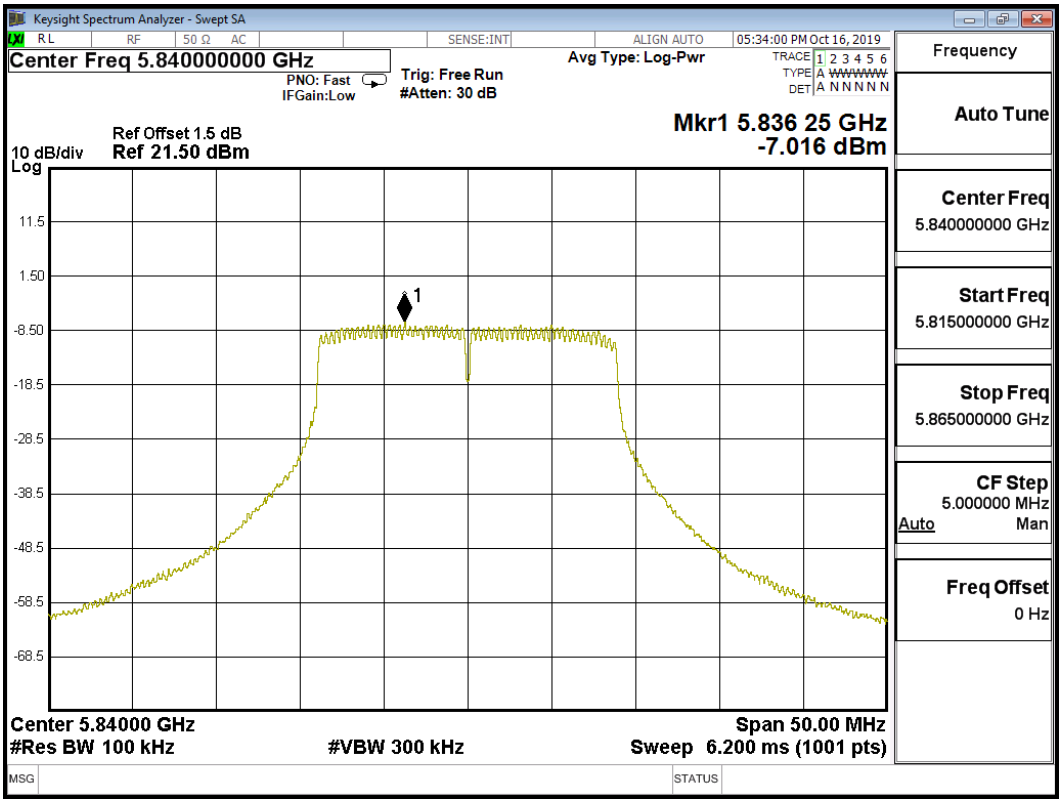
Channel 184 – Chain A



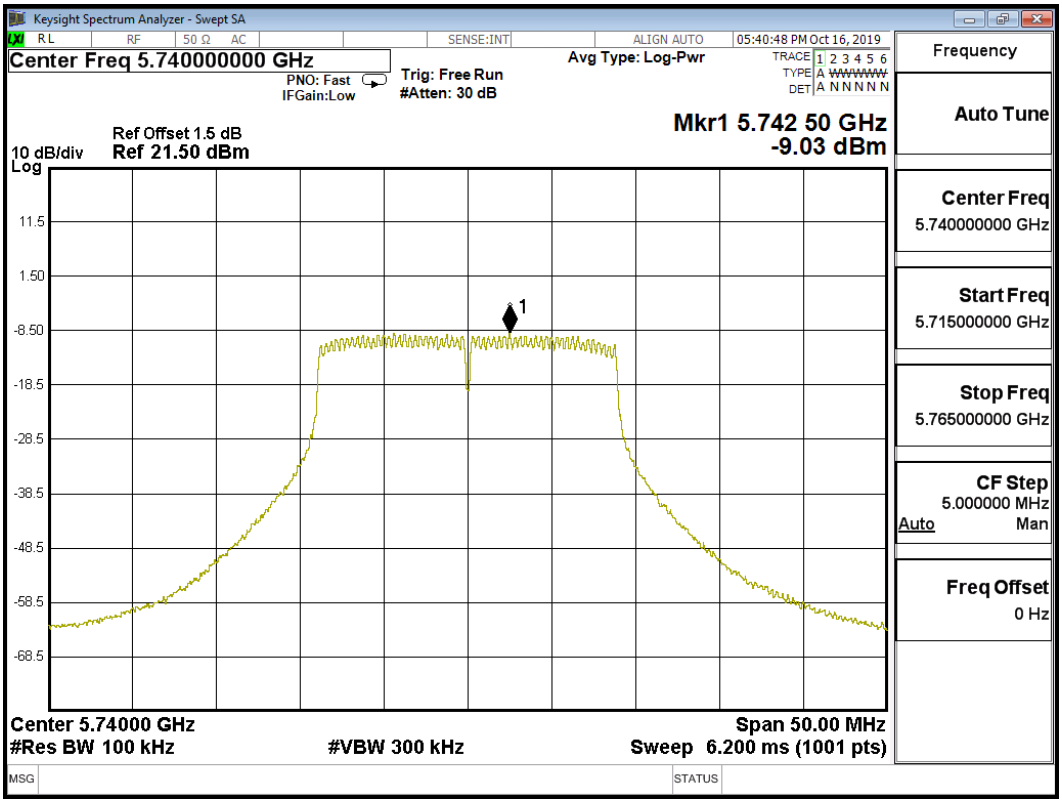
Channel 192 – Chain A



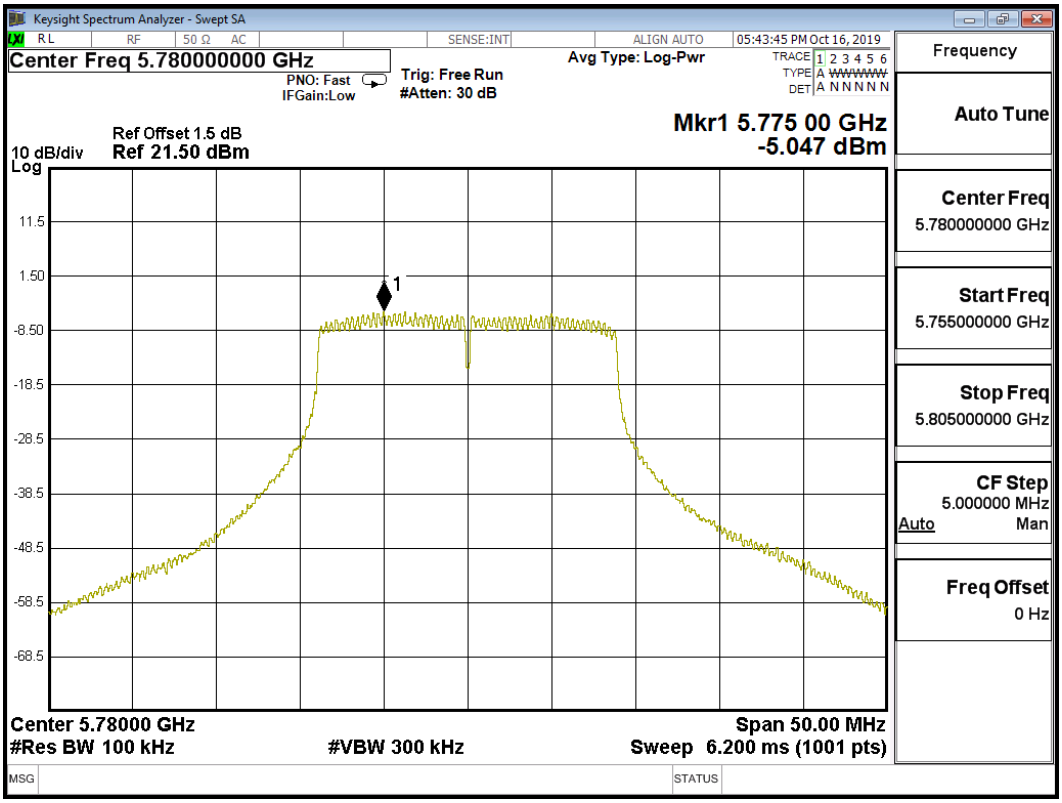
Channel 204 – Chain A



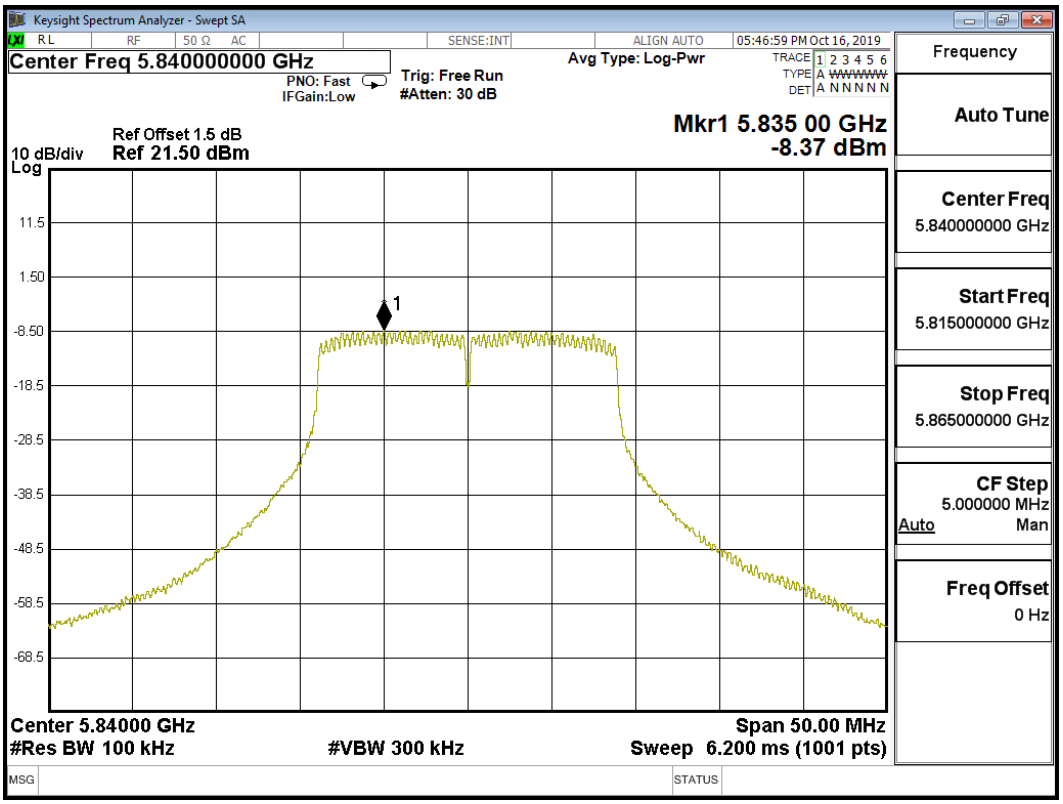
Channel 184 – Chain B



Channel 192 – Chain B



Channel 204 – Chain B

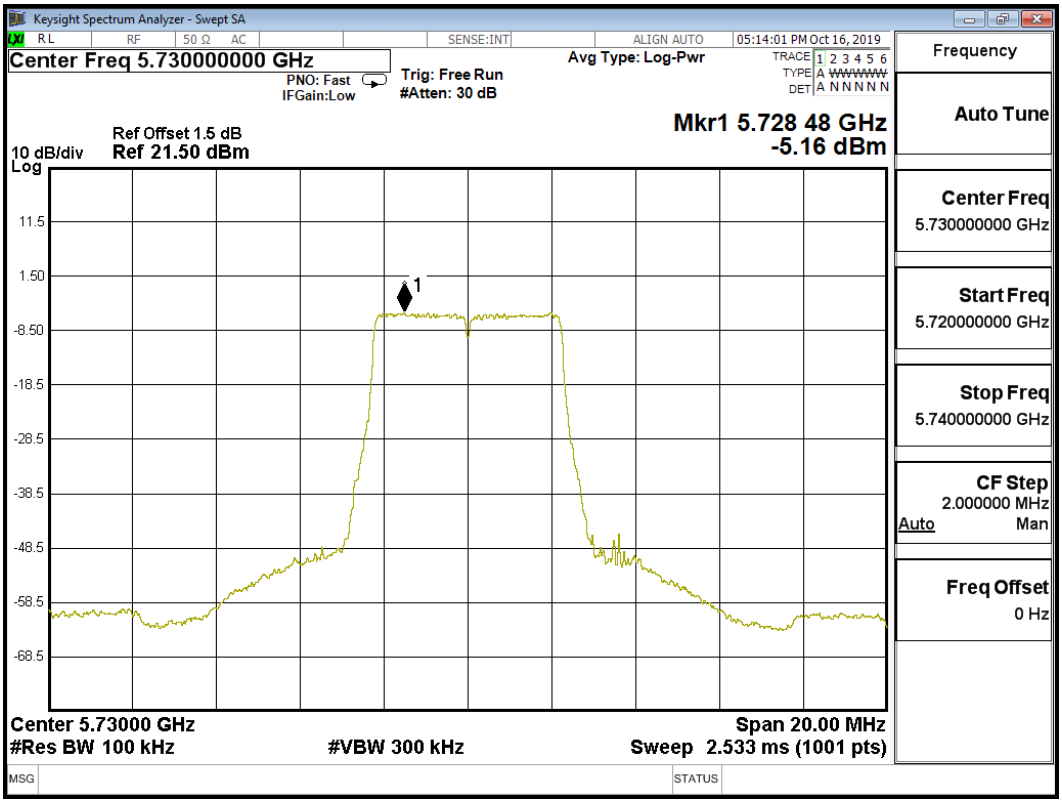


Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.8)

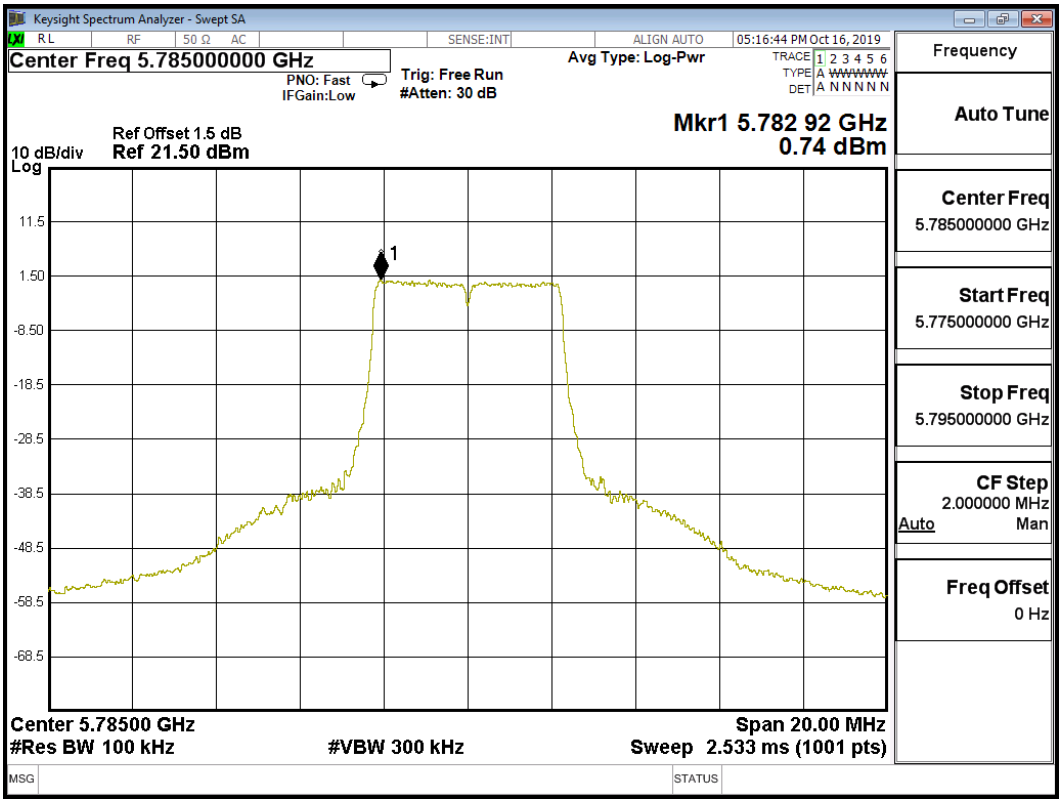
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
182	5730	A	-5.160	6.980	4.830	<23	Pass
		B	-5.860	6.980	4.130	<23	Pass
193	5785	A	0.740	6.980	10.730	<23	Pass
		B	-0.420	6.980	9.570	<23	Pass
205	5845	A	-4.310	6.980	5.680	<23	Pass
		B	-4.840	6.980	5.150	<23	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

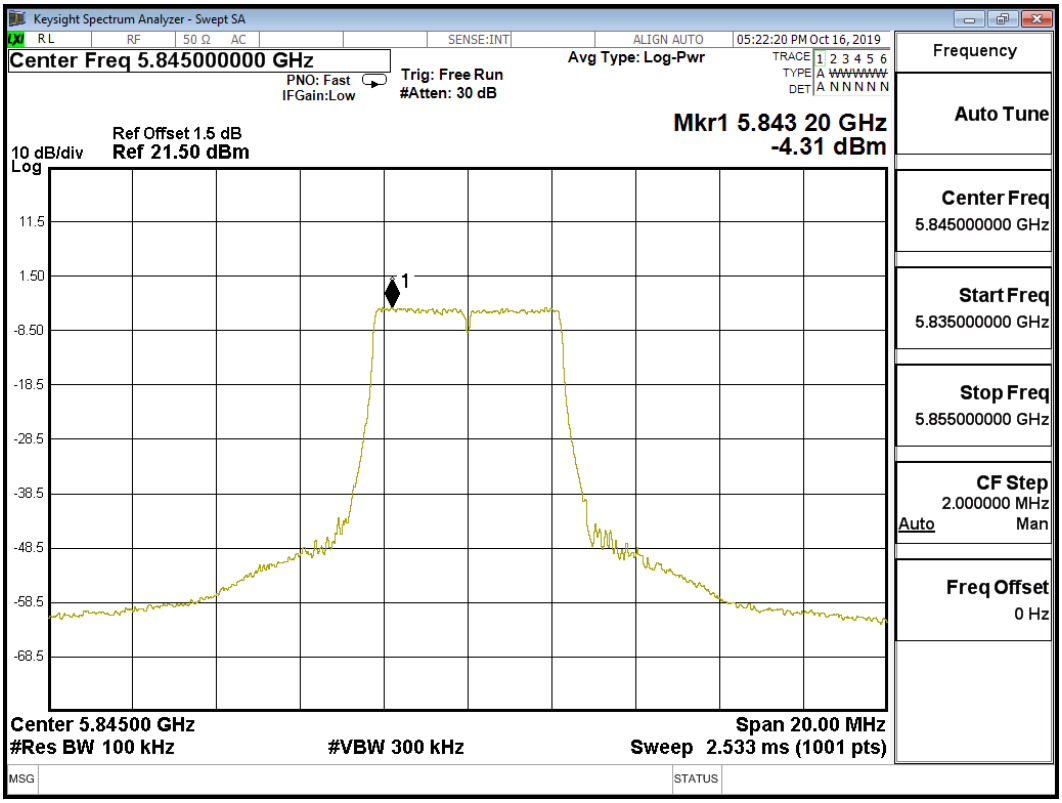
Channel 182 – Chain A



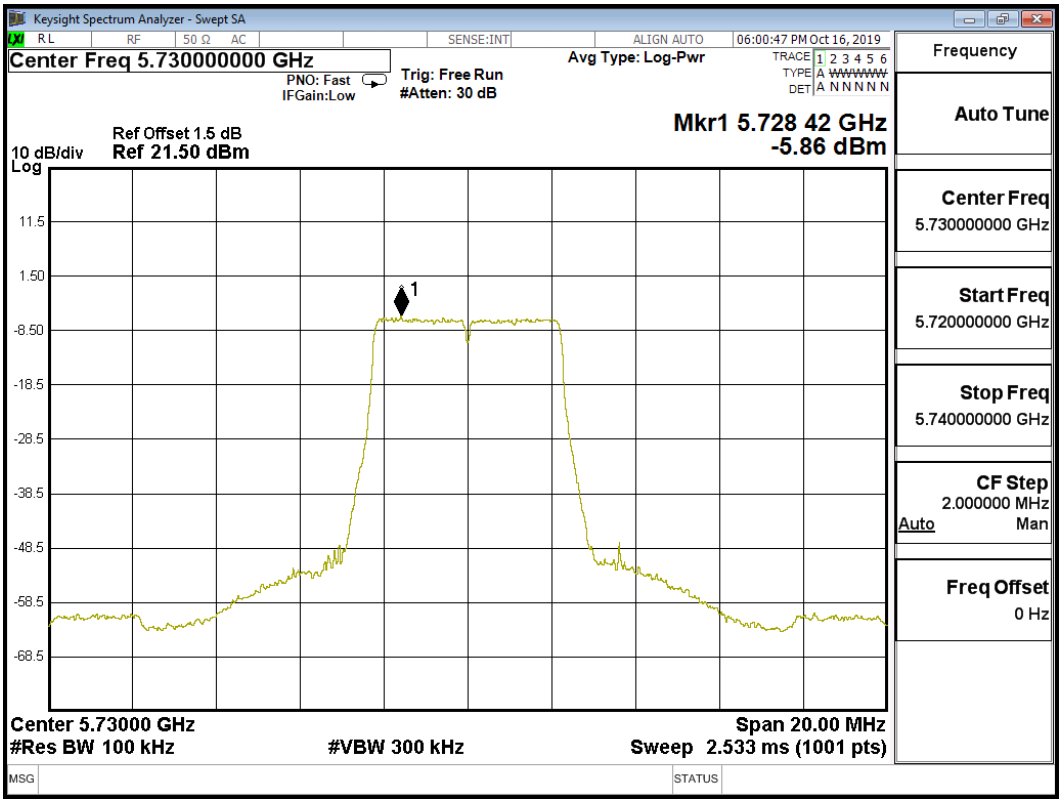
Channel 193 – Chain A



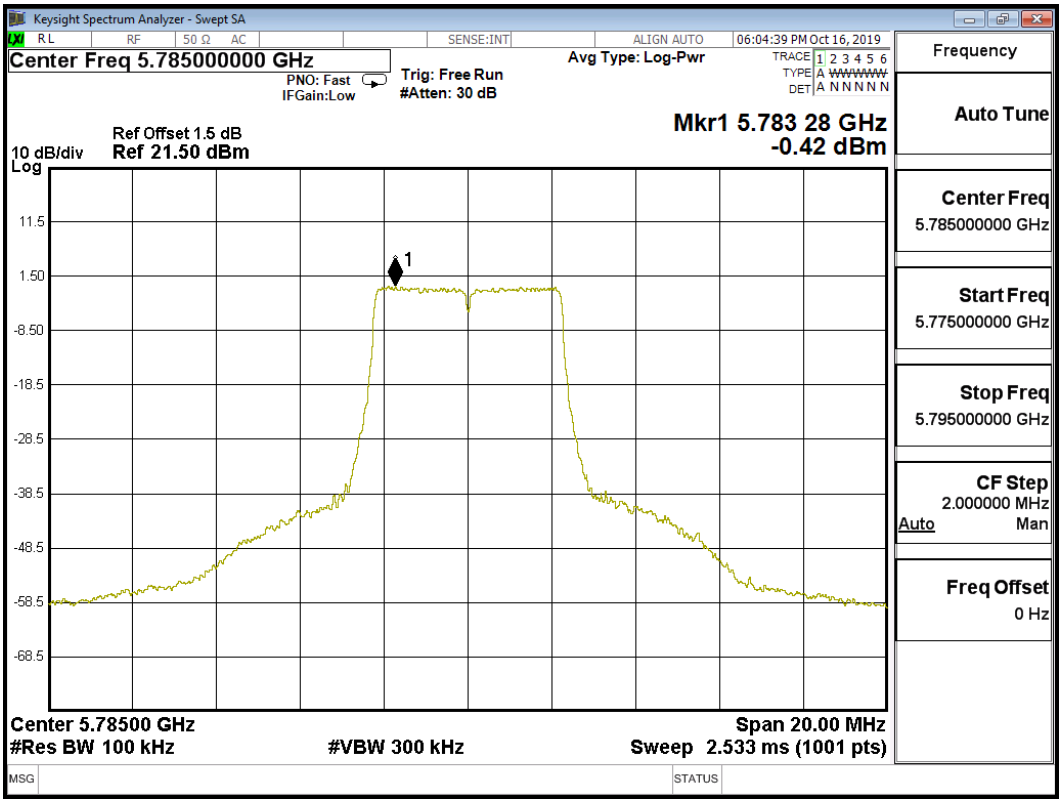
Channel 205 – Chain A



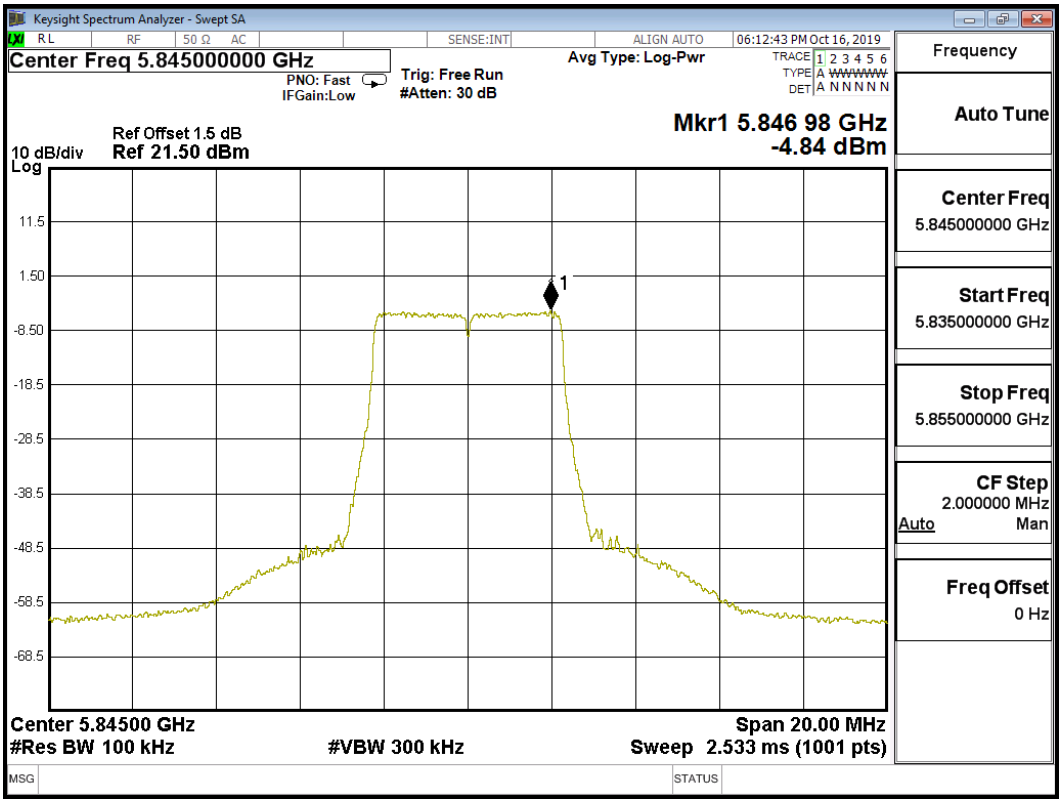
Channel 182 – Chain B



Channel 193 – Chain B



Channel 205 – Chain B

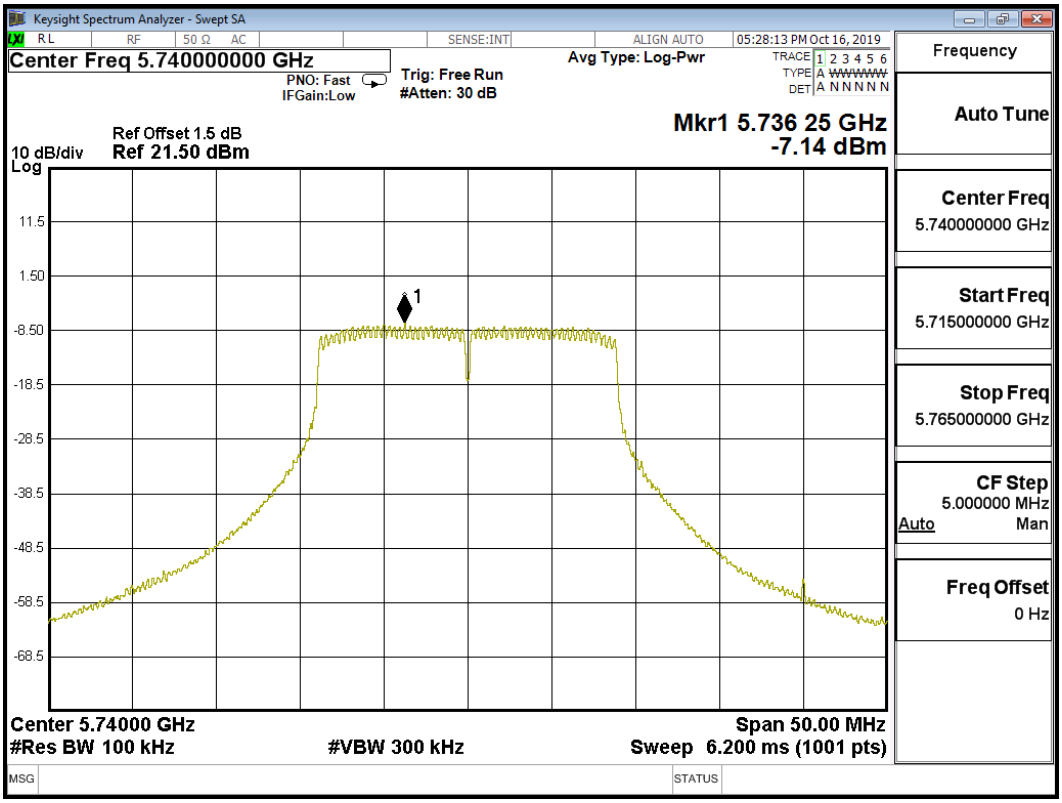


Product : Moxa 2.4/4.9/5 GHz
Test Item : Peak Power Spectral Density
Test Site : No.3 OATS
Test Date : 2019/10/17
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.8)

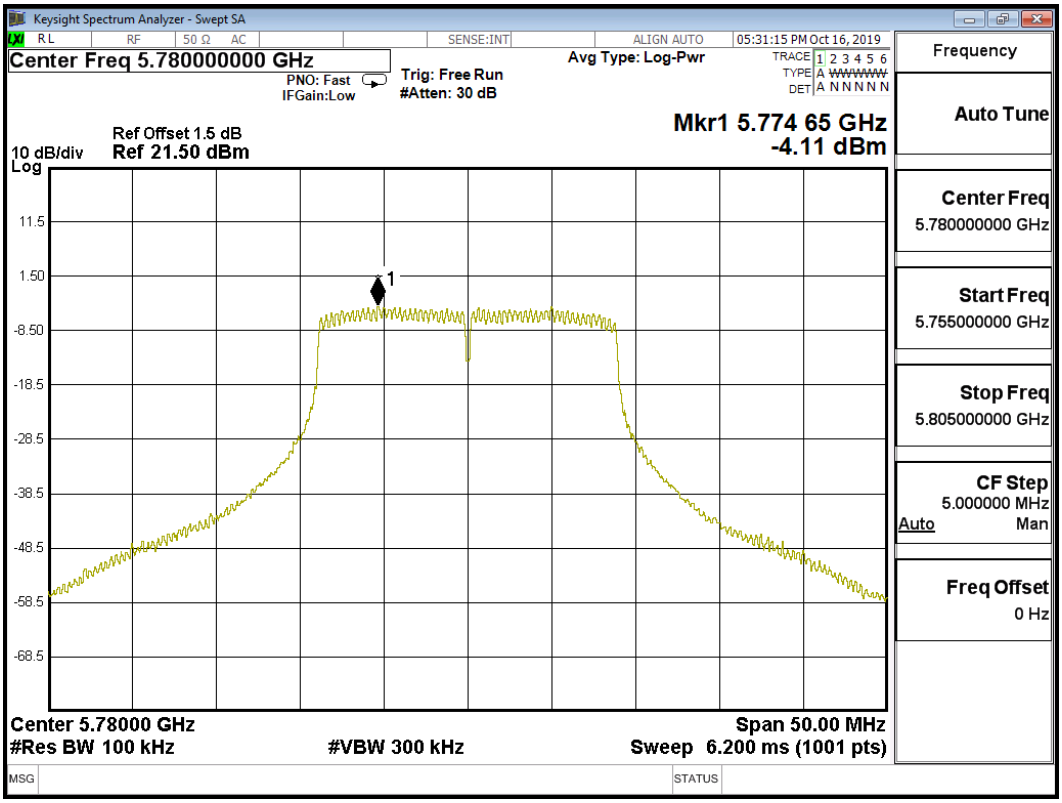
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)[1]	Required Limit (dBm)	Result
184	5740	A	-7.140	6.980	2.850	<30	Pass
		B	-9.300	6.980	0.690	<30	Pass
192	5780	A	-4.110	6.980	5.880	<30	Pass
		B	-5.210	6.980	4.780	<30	Pass
204	5840	A	-10.358	6.980	-0.368	<30	Pass
		B	-10.521	6.980	-0.531	<30	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

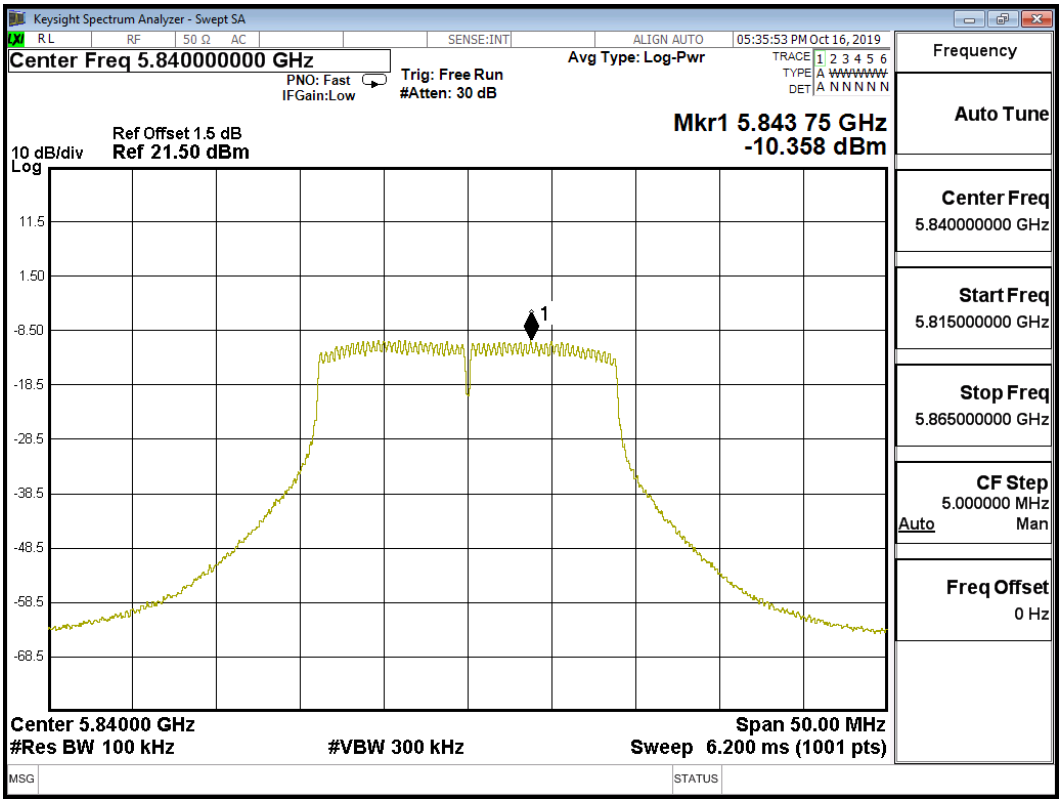
Channel 184 – Chain A



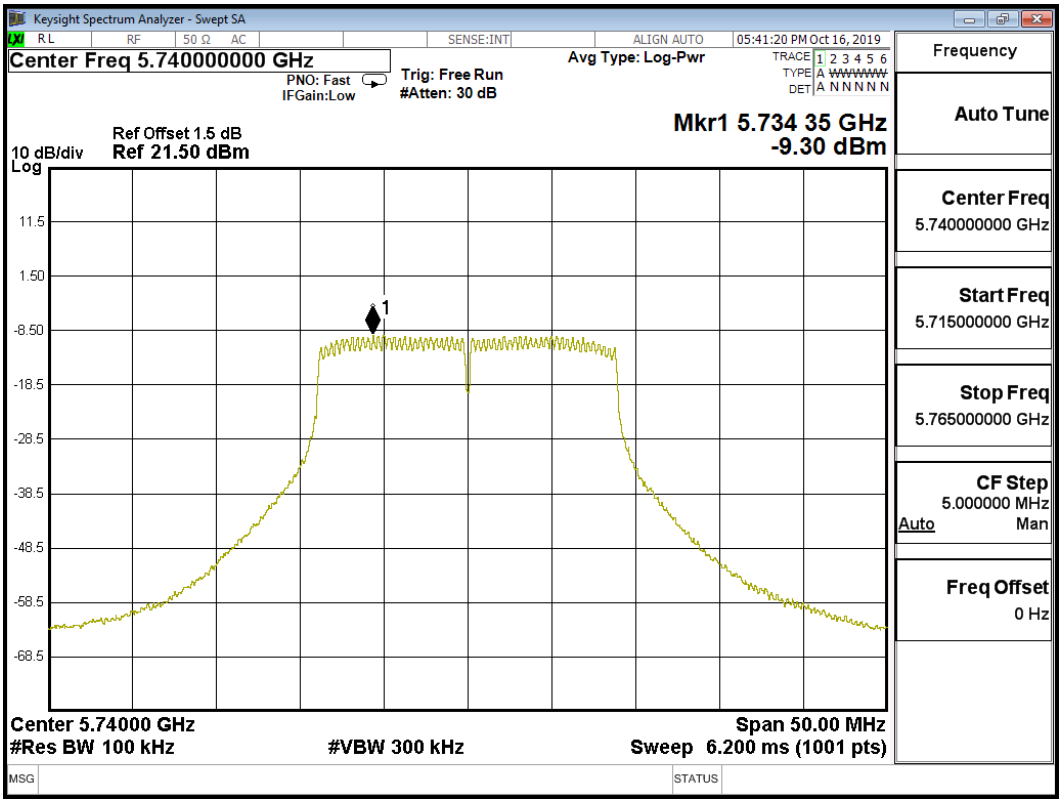
Channel 192 – Chain A



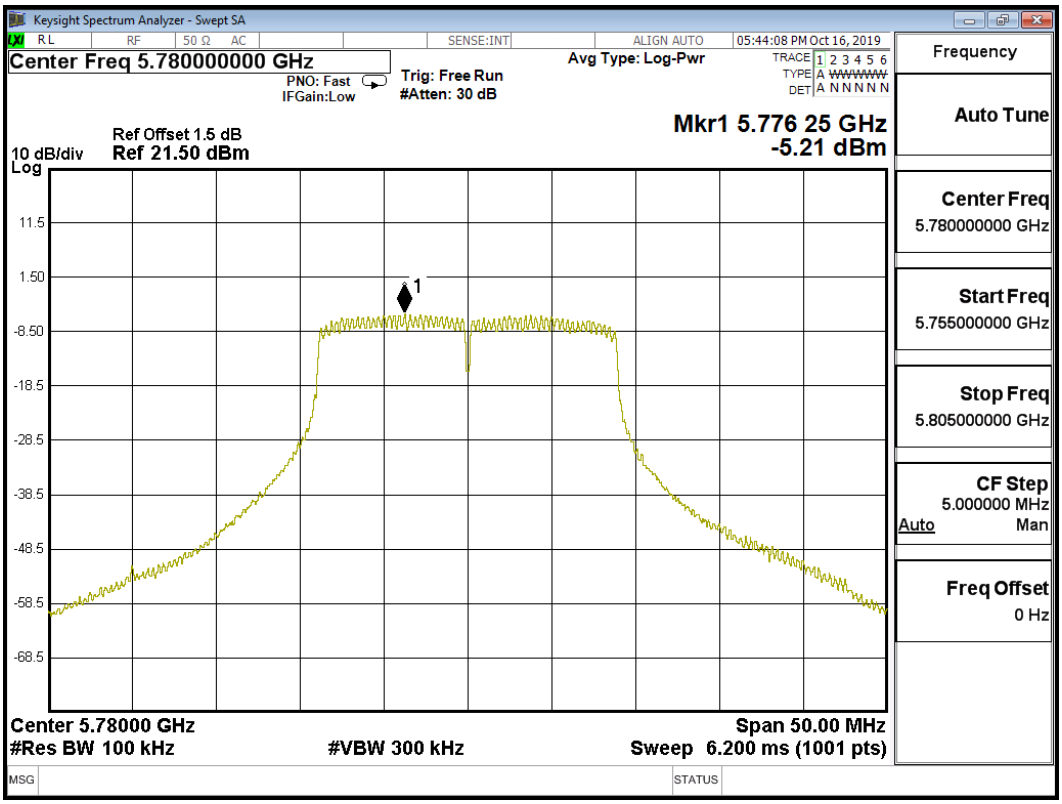
Channel 204 – Chain A



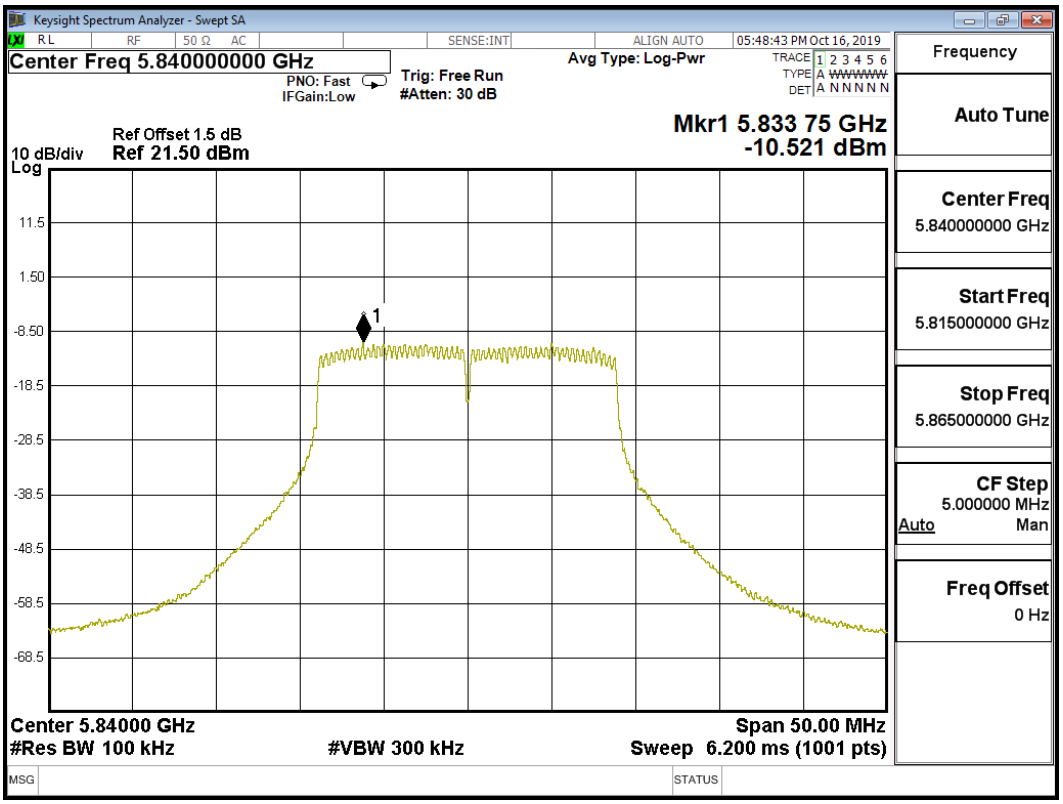
Channel 184 – Chain B



Channel 192 – Chain B



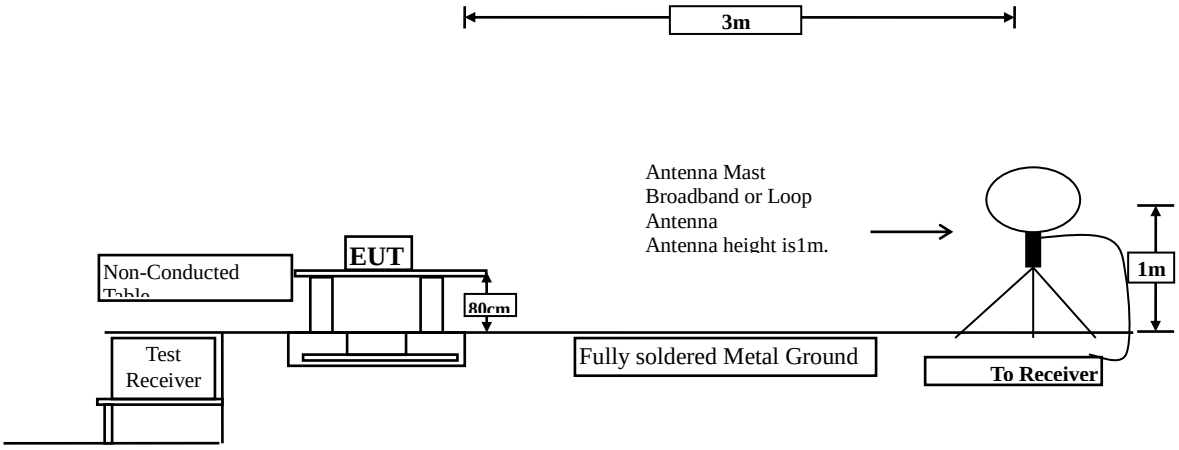
Channel 204 – Chain B



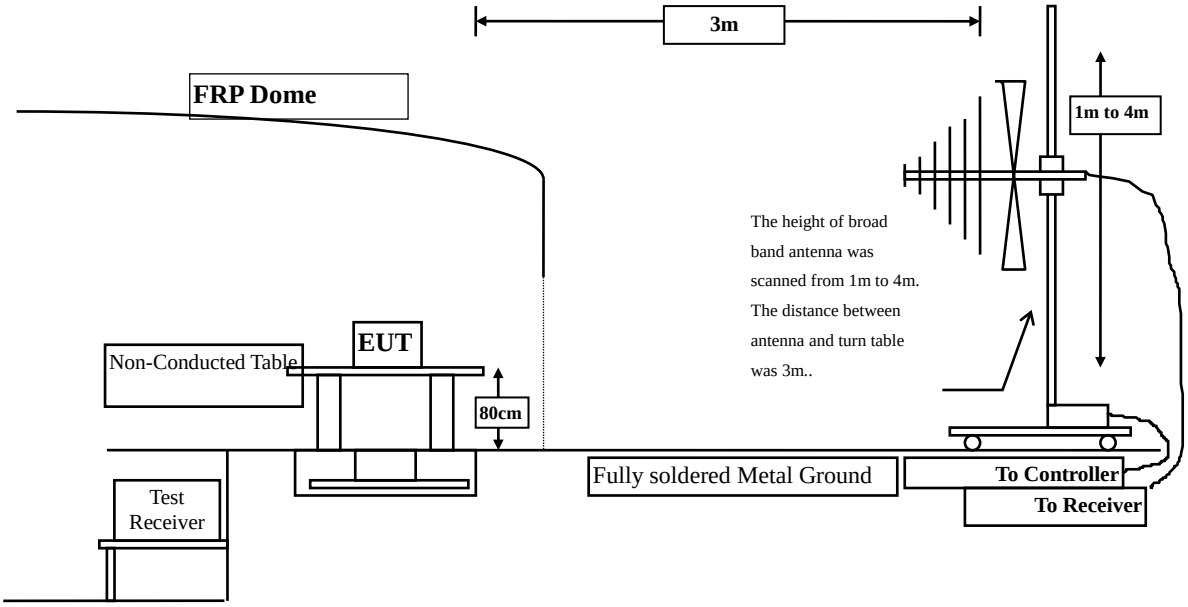
5. Radiated Emission

5.1. Test Setup

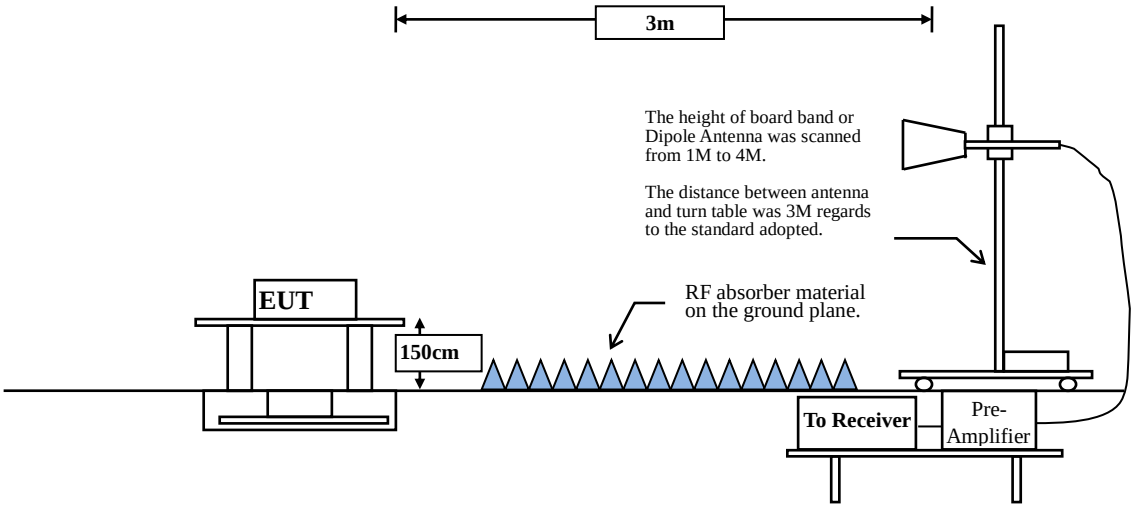
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5.8GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
5MHz	92.24	7.7536	129	200
20MHz	86.45	1.9420	515	1000

Note: Duty Cycle Refer to Section 8.

5.4. Uncertainty

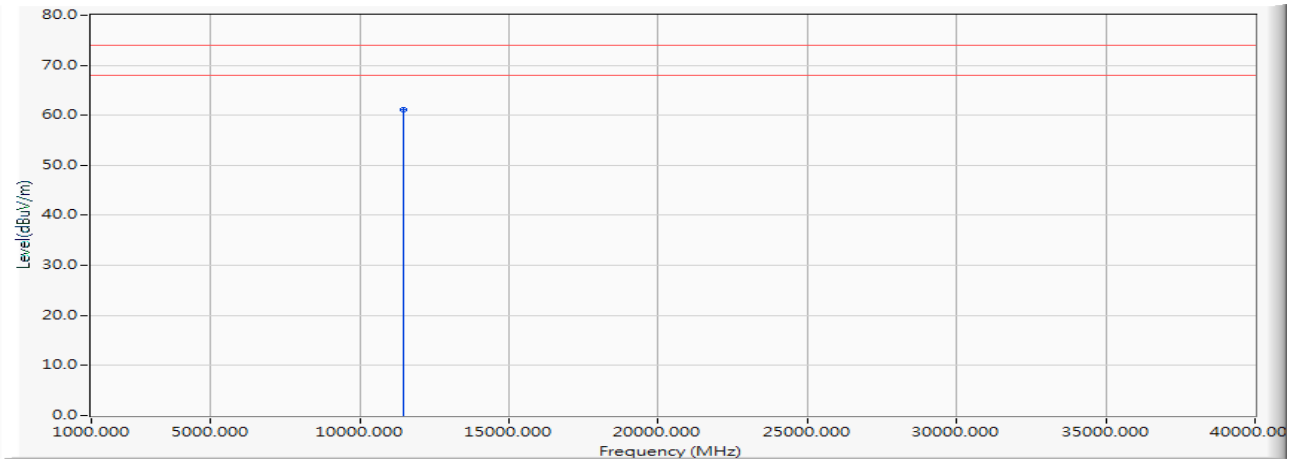
± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

5.5. Test Result of Radiated Emission

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.7)

Horizontal



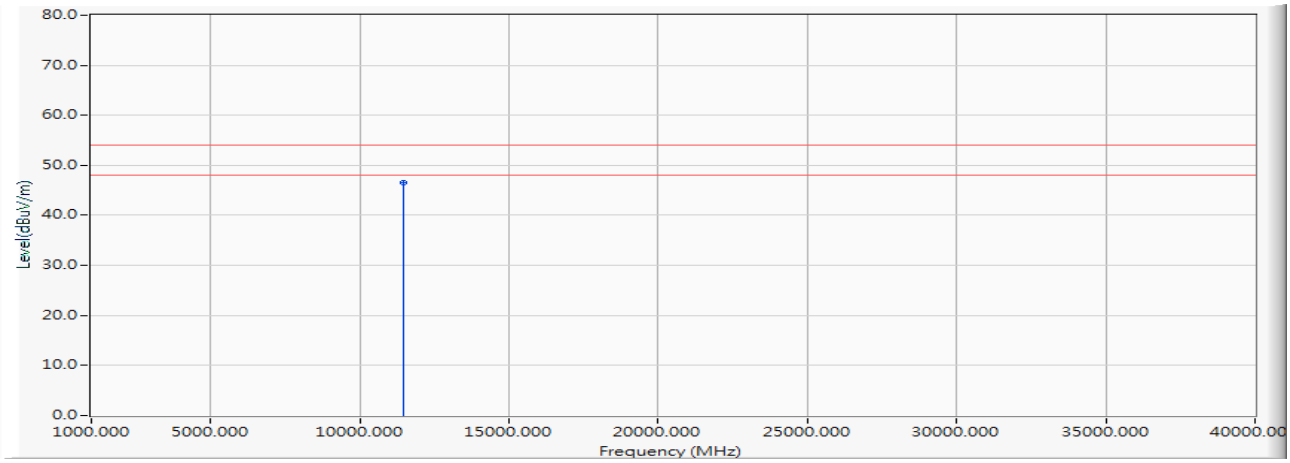
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	44.519	61.189	-12.811	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.7)

Horizontal



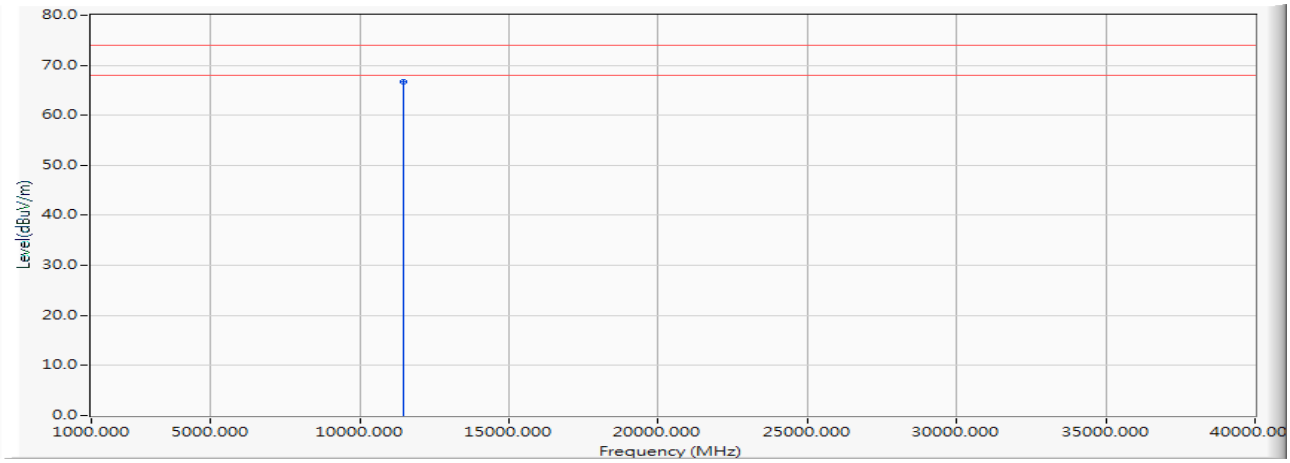
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	29.879	46.549	-7.451	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.7)

Vertical



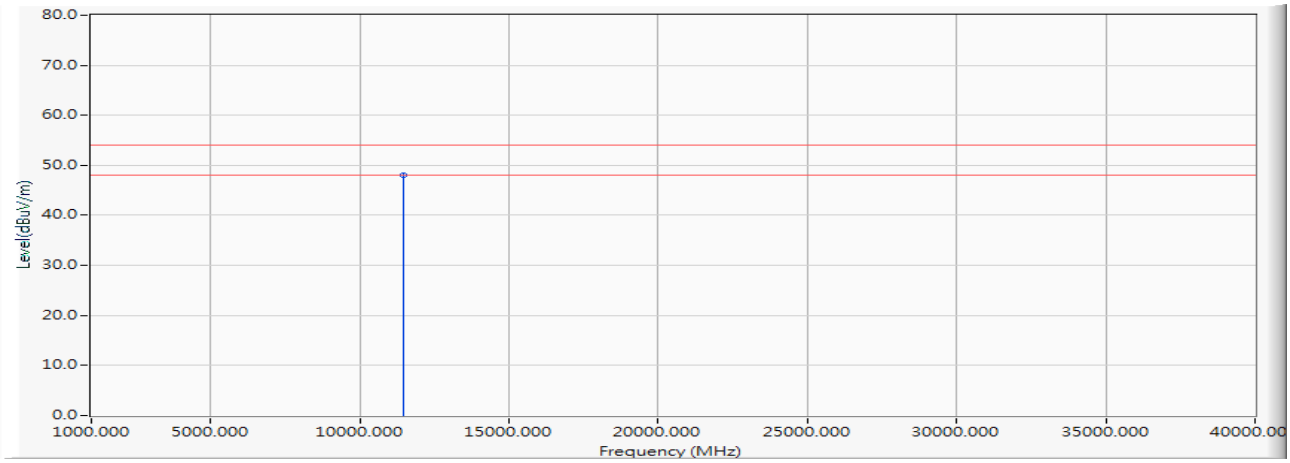
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	50.035	66.705	-7.295	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.7)

Vertical



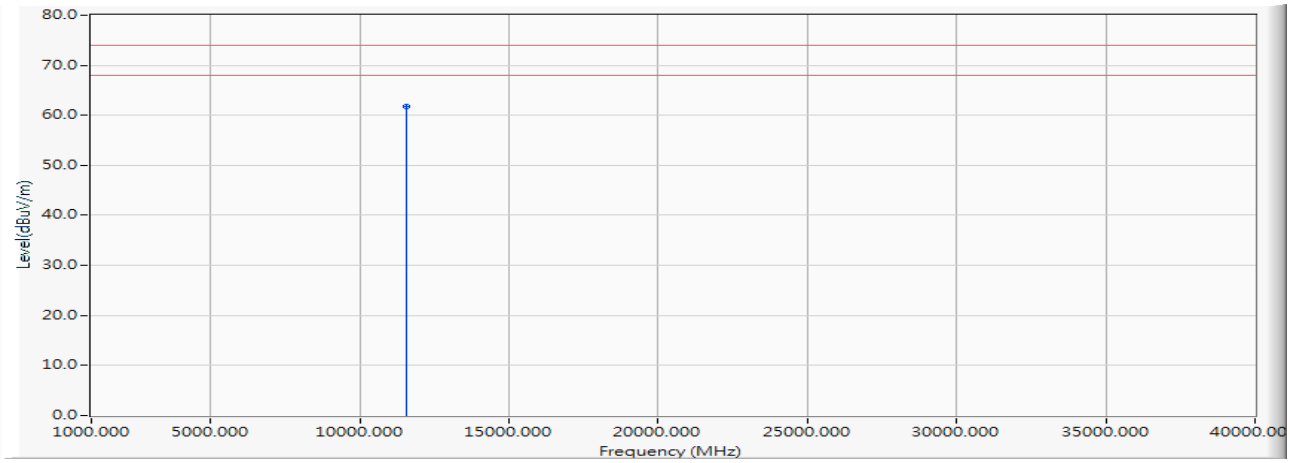
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	31.445	48.115	-5.885	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Horizontal



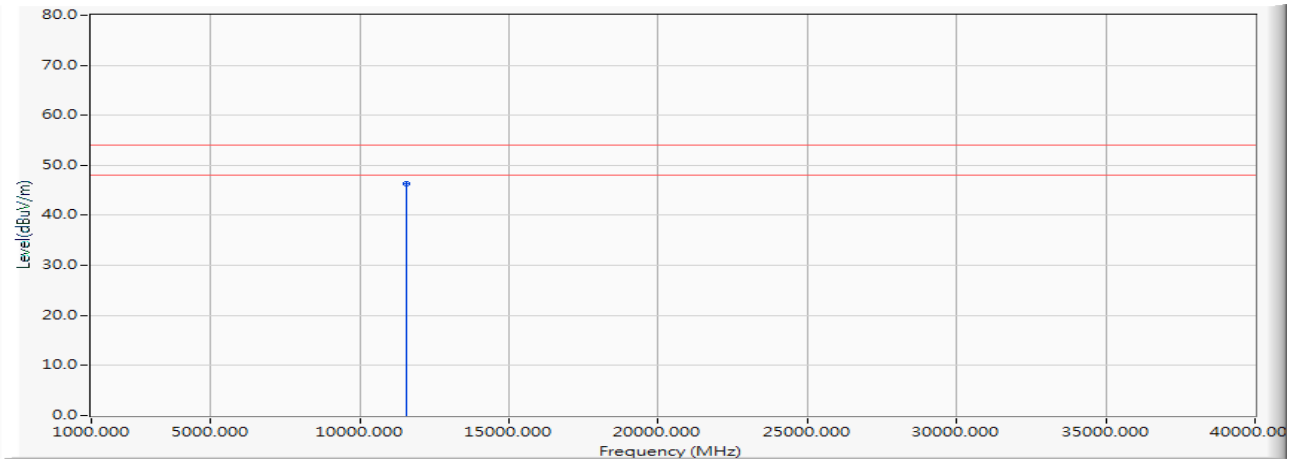
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	45.110	61.728	-12.272	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Horizontal



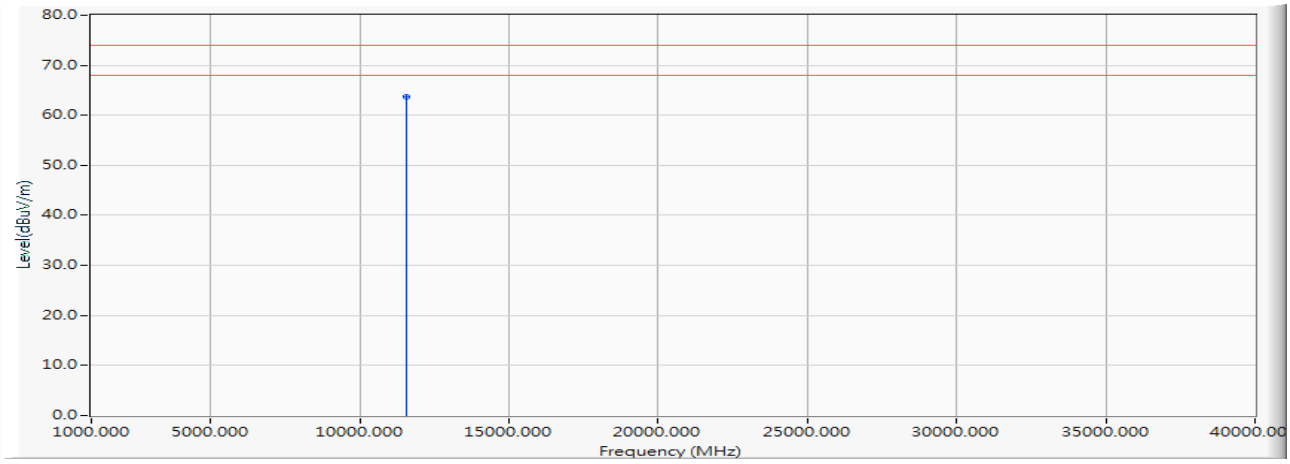
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	29.730	46.348	-7.652	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Vertical



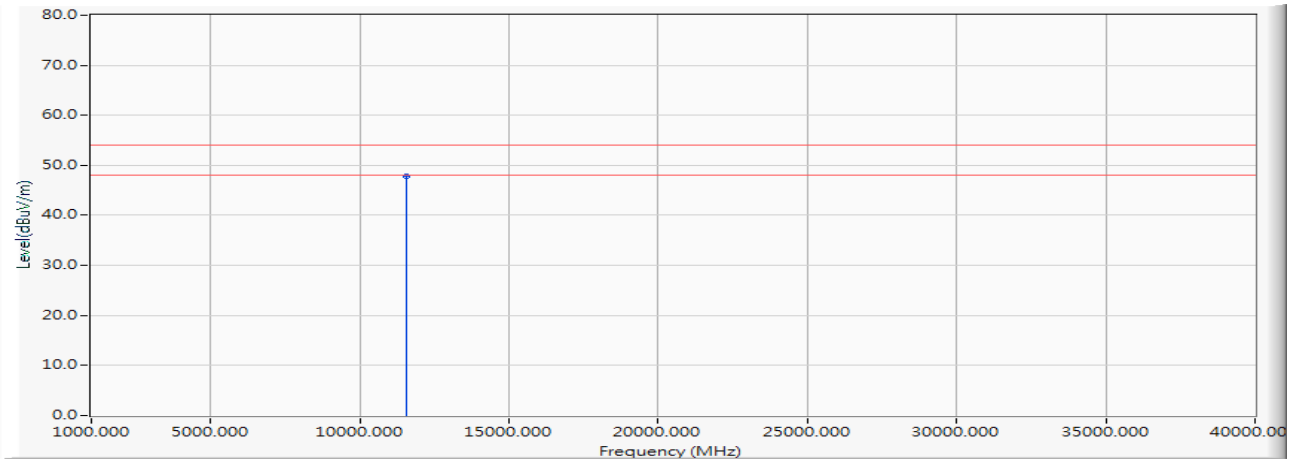
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	47.168	63.786	-10.214	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Vertical



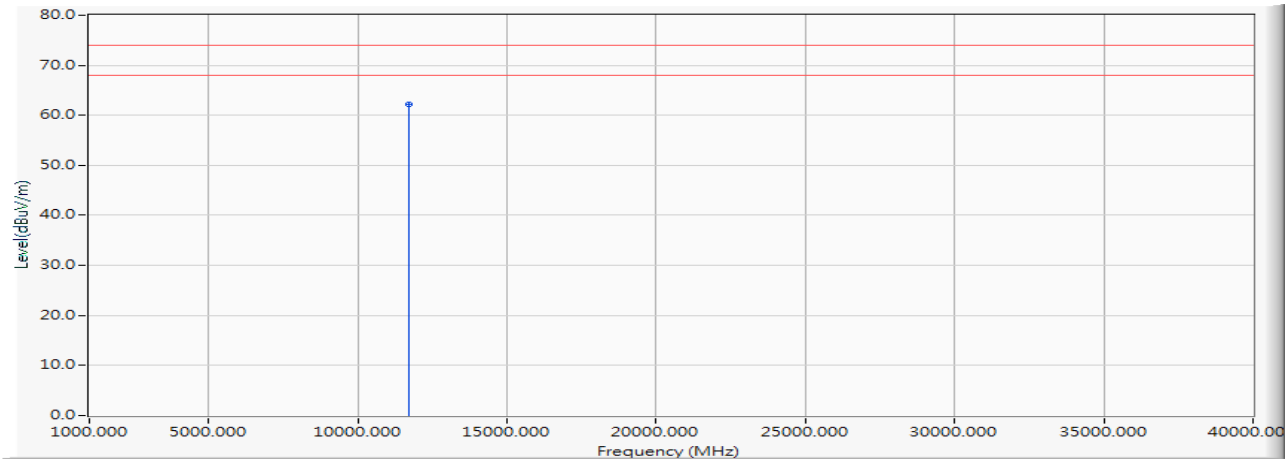
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	31.298	47.916	-6.084	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.7)

Horizontal



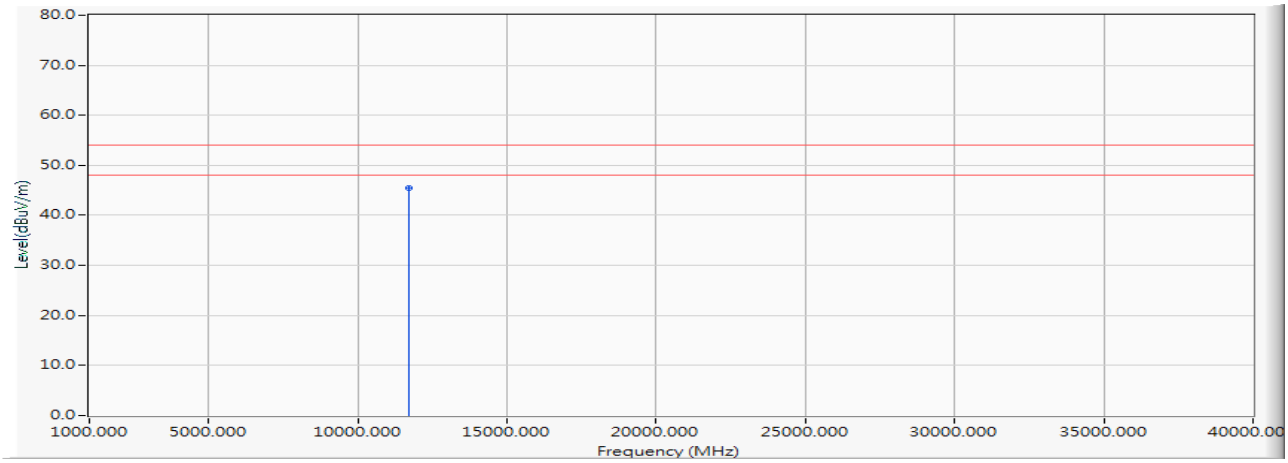
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	45.280	62.211	-11.789	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.7)

Horizontal



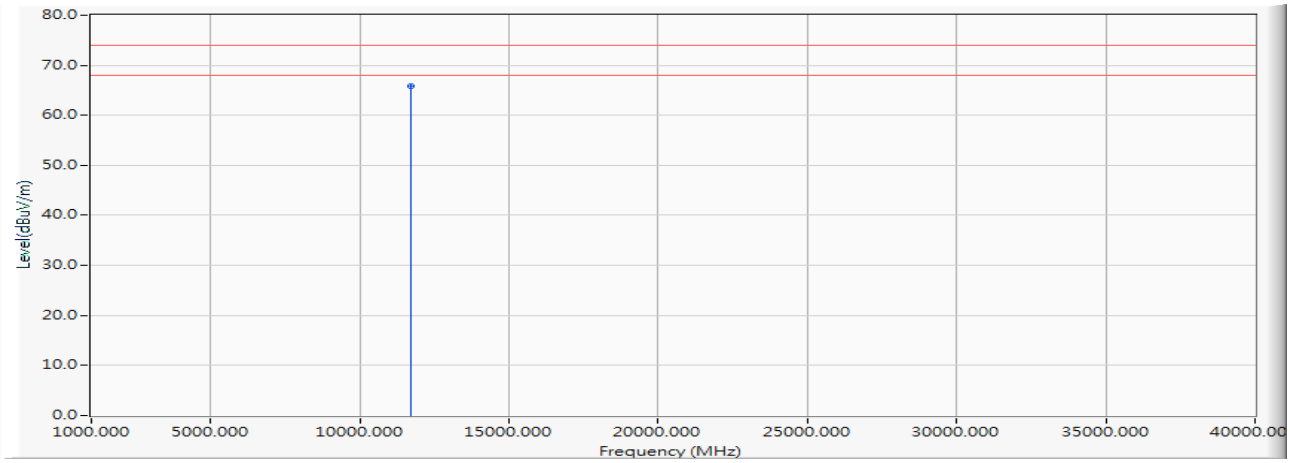
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	28.510	45.441	-8.559	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.7)

Vertical



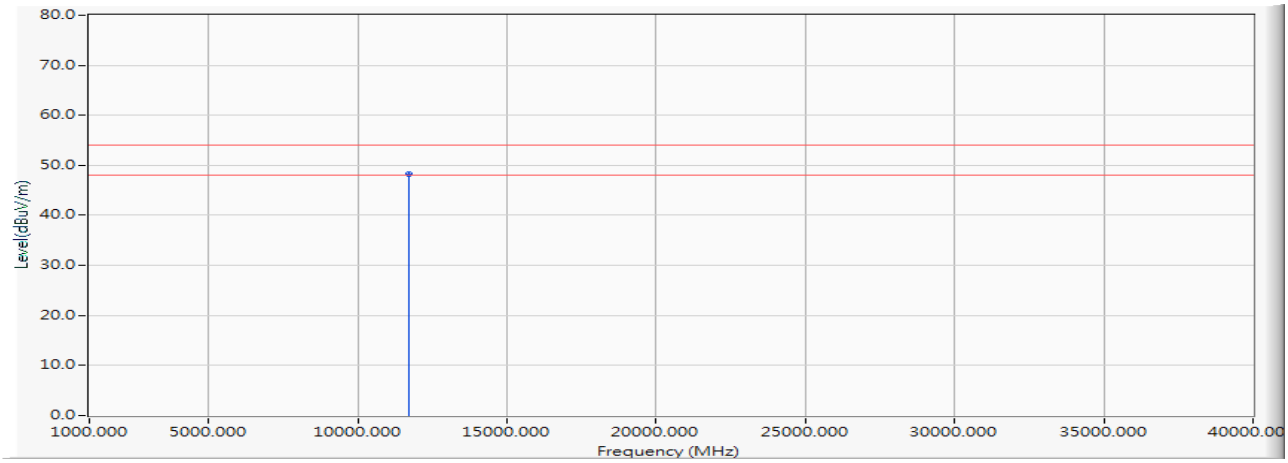
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	48.847	65.778	-8.222	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.7)

Vertical



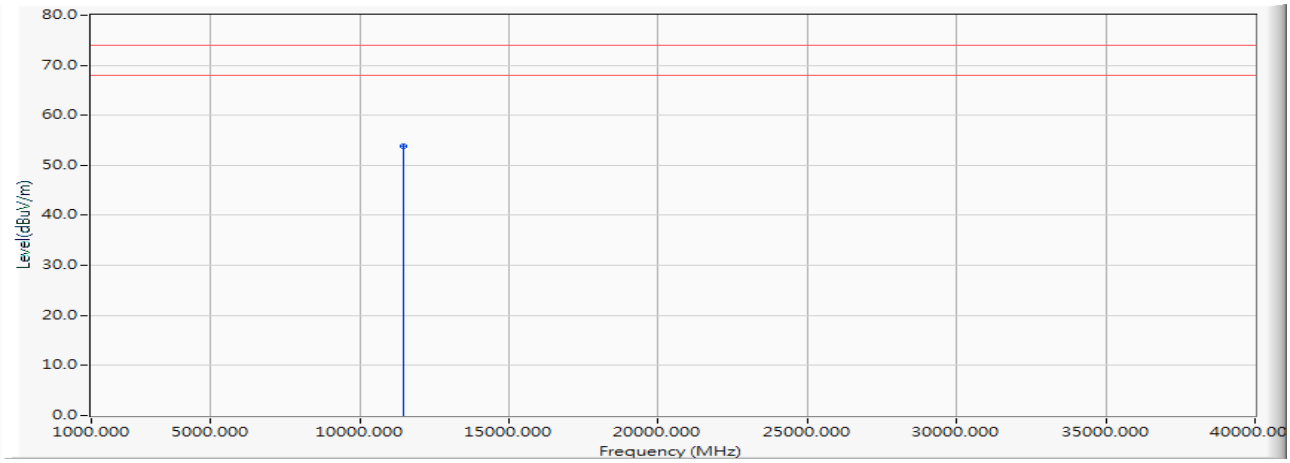
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	31.247	48.178	-5.822	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.7)

Horizontal



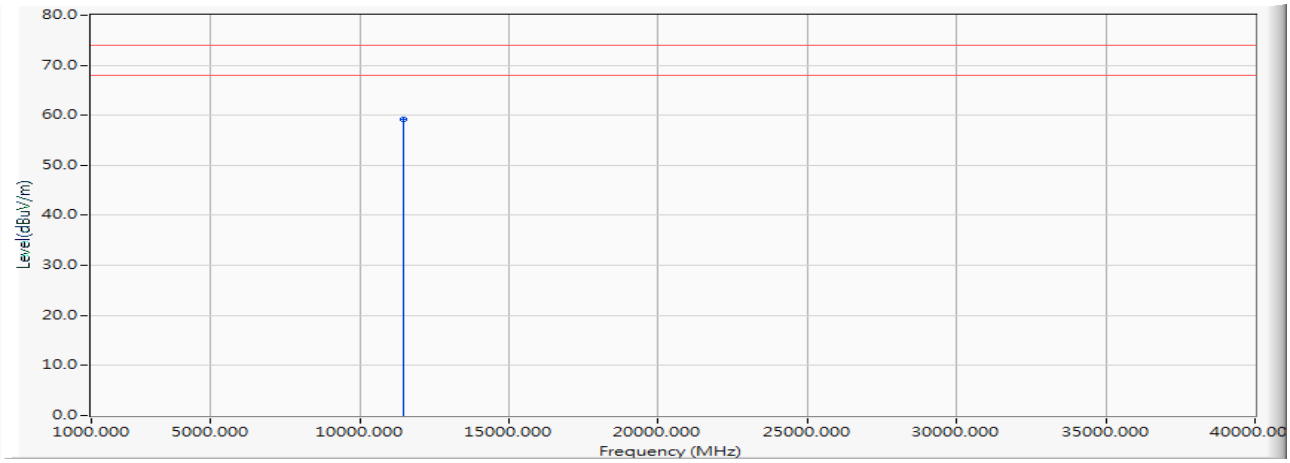
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	37.301	53.791	-20.209	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.7)

Vertical



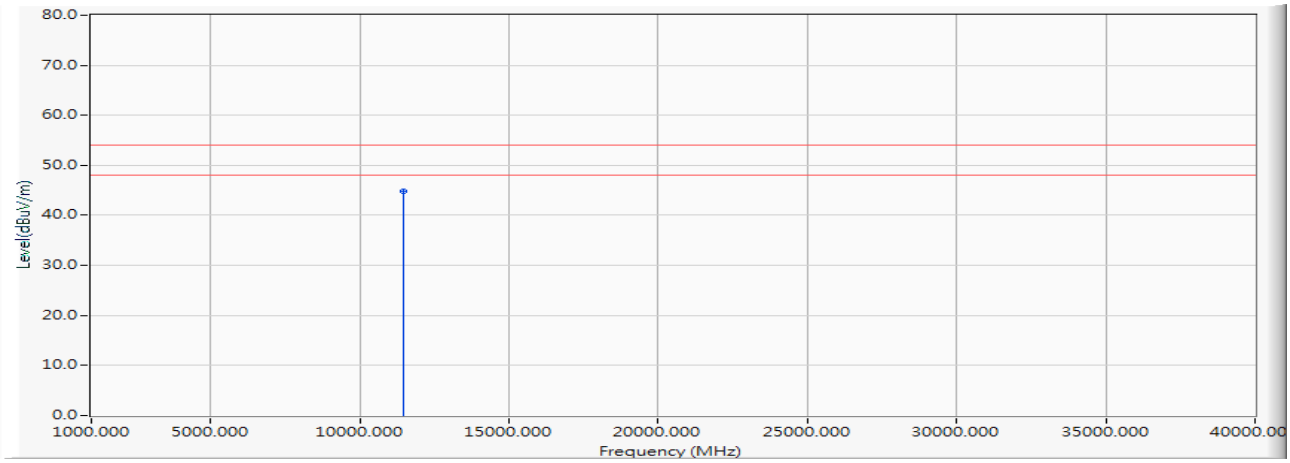
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	42.803	59.293	-14.707	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.7)

Vertical



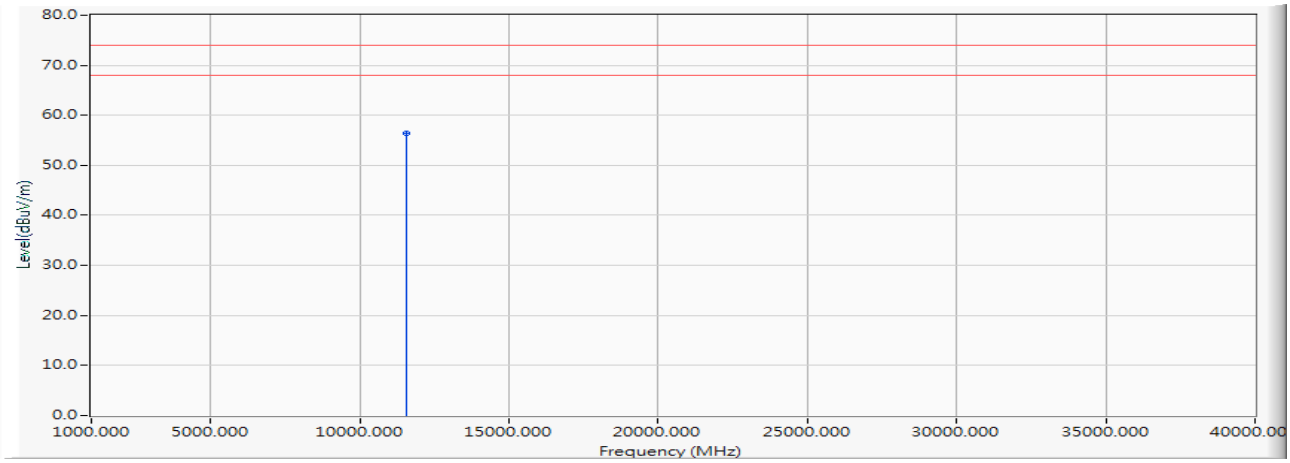
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	28.233	44.723	-9.277	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Horizontal



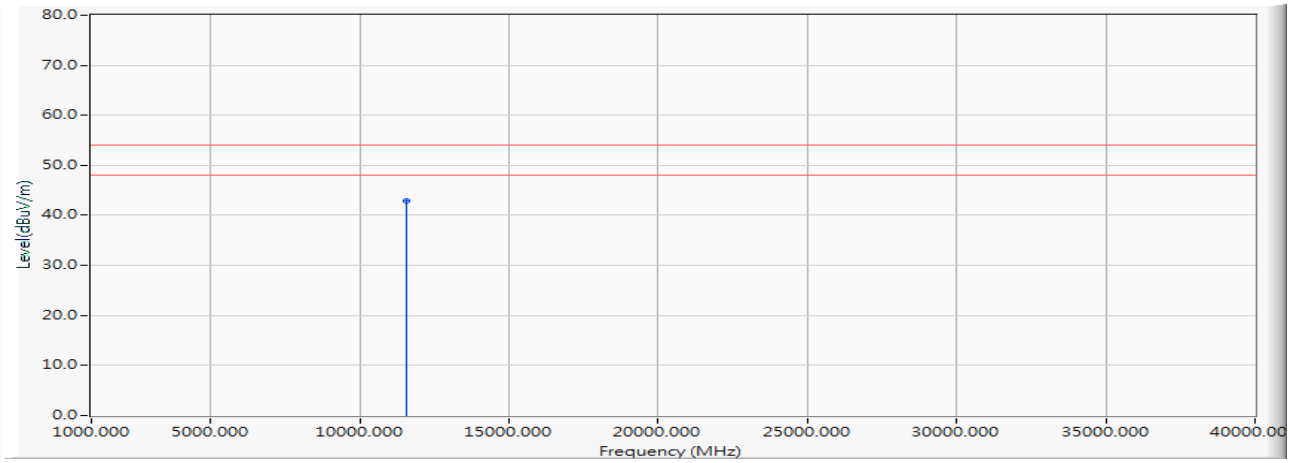
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	39.719	56.369	-17.631	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Horizontal



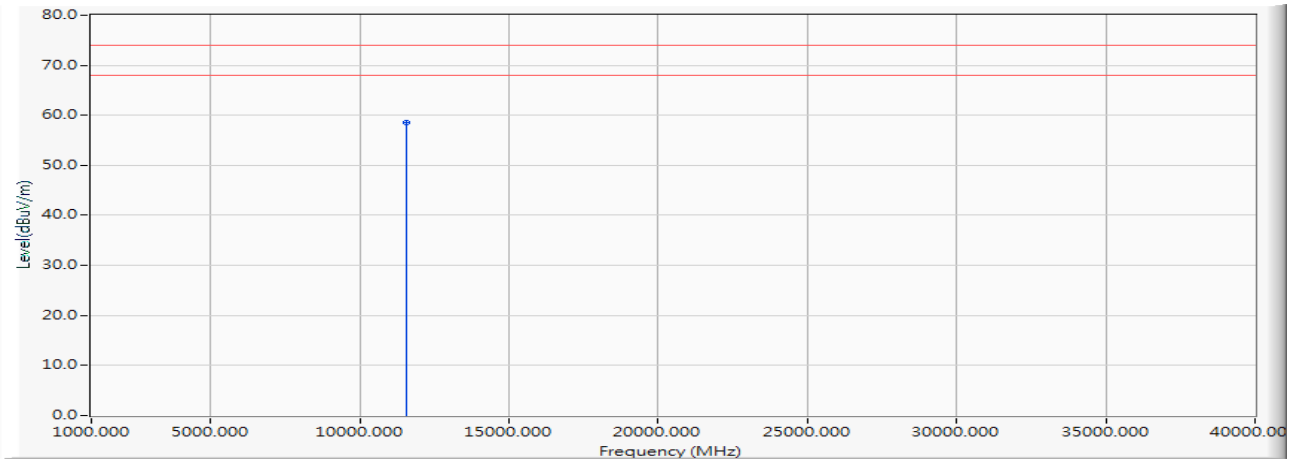
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	26.149	42.799	-11.201	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Vertical



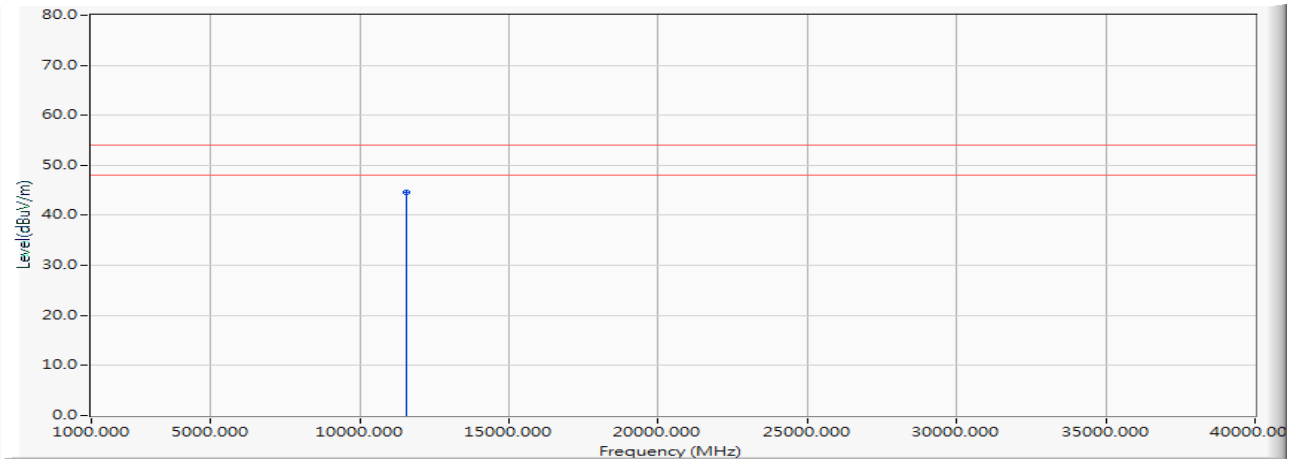
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	41.800	58.450	-15.550	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Vertical



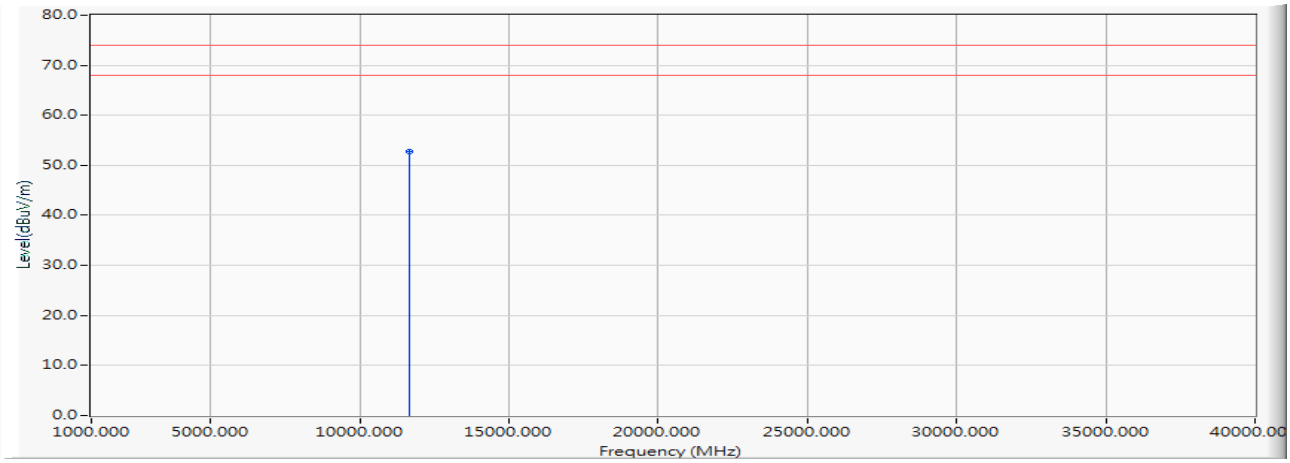
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	27.960	44.610	-9.390	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.7)

Horizontal



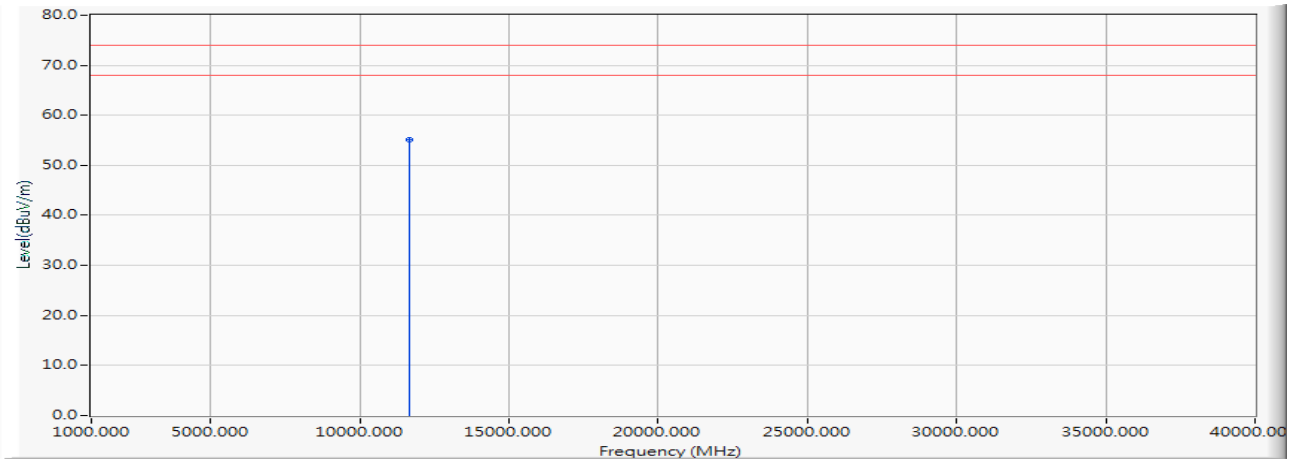
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	35.877	52.776	-21.224	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.7)

Vertical



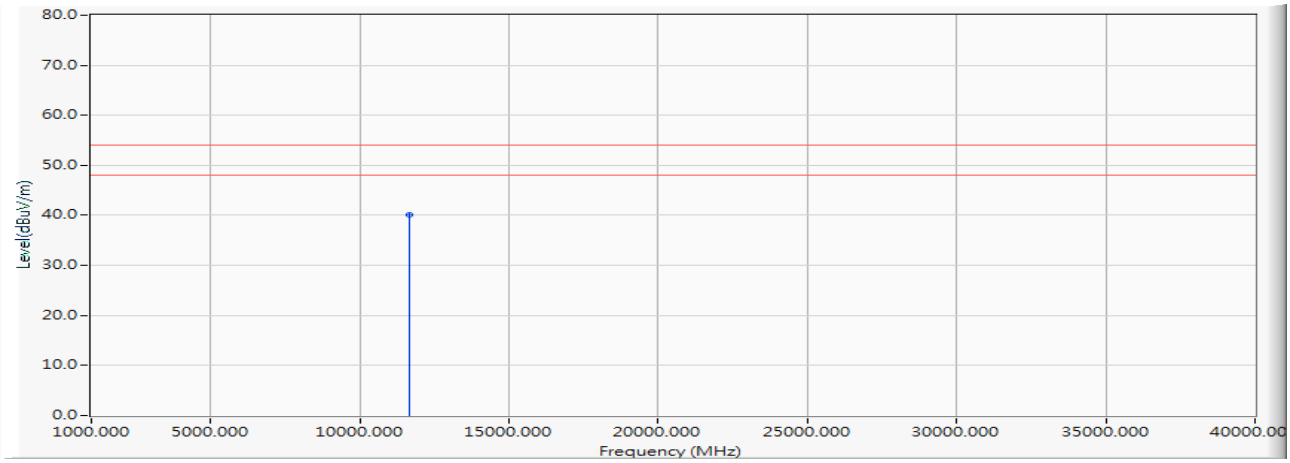
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	38.290	55.189	-18.811	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.7)

Vertical



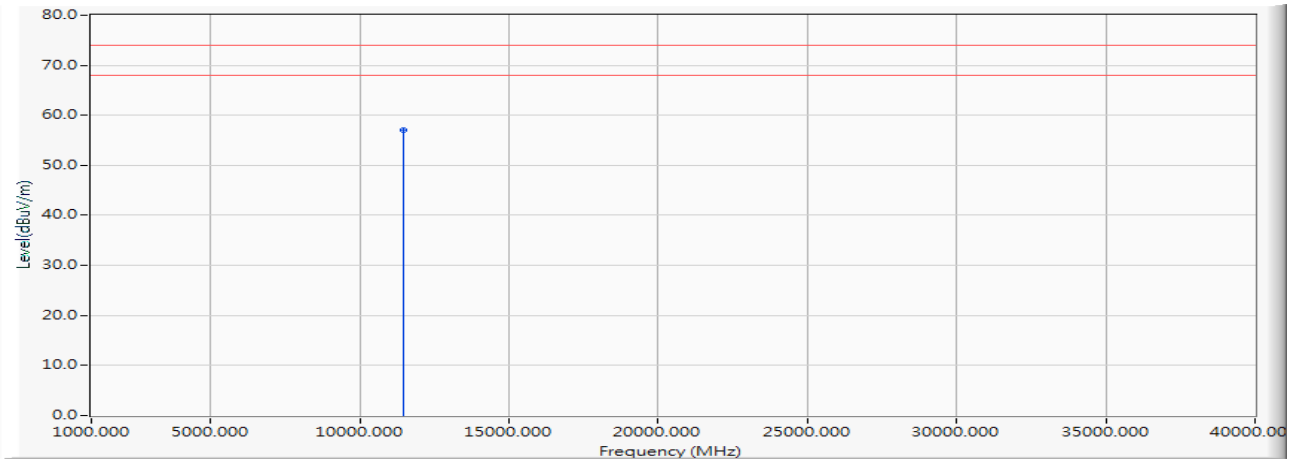
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	23.240	40.139	-13.861	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.8)

Horizontal



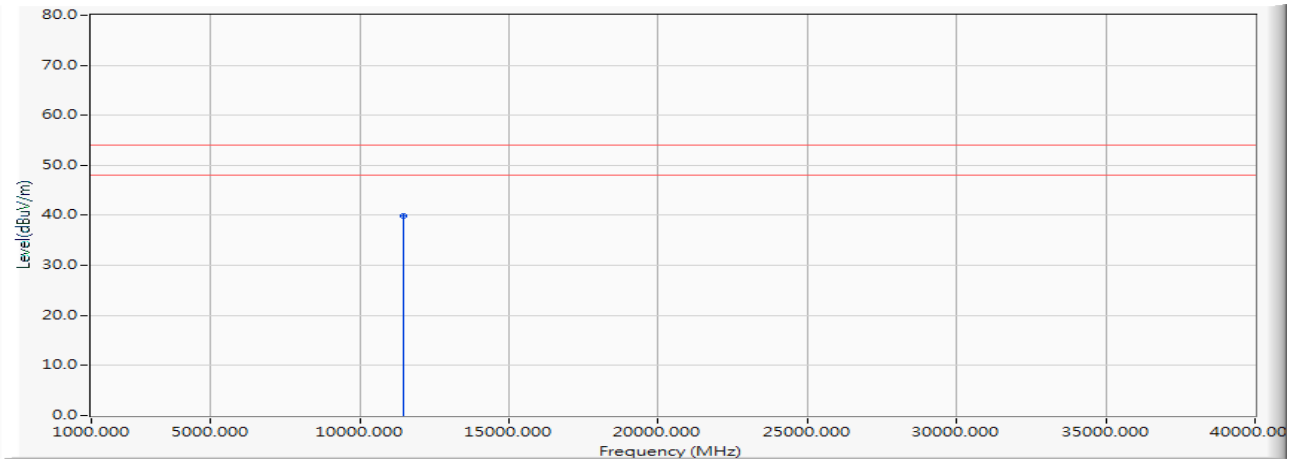
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	40.449	57.119	-16.881	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.8)

Horizontal



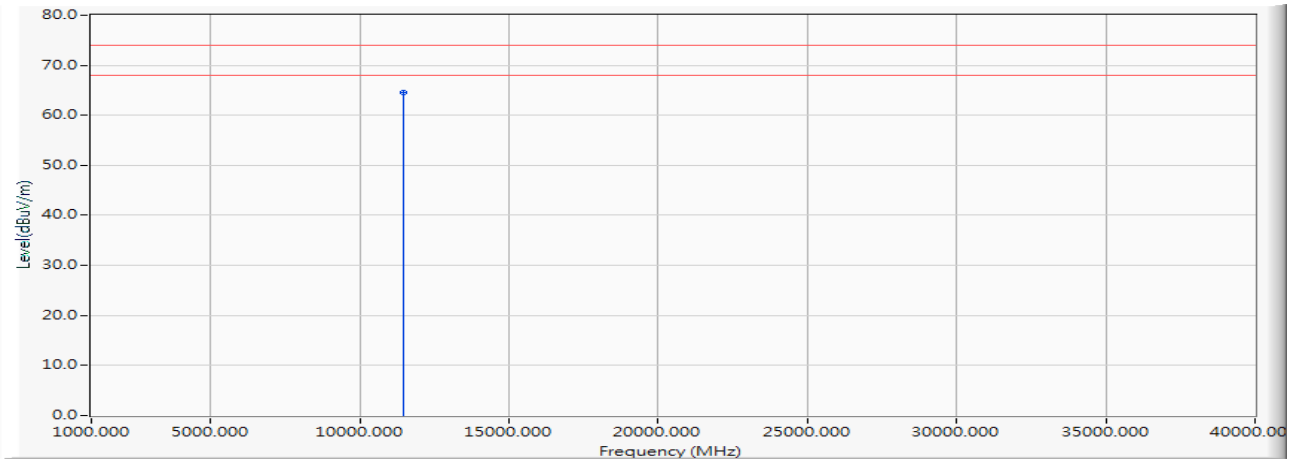
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	23.289	39.959	-14.041	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.8)

Vertical



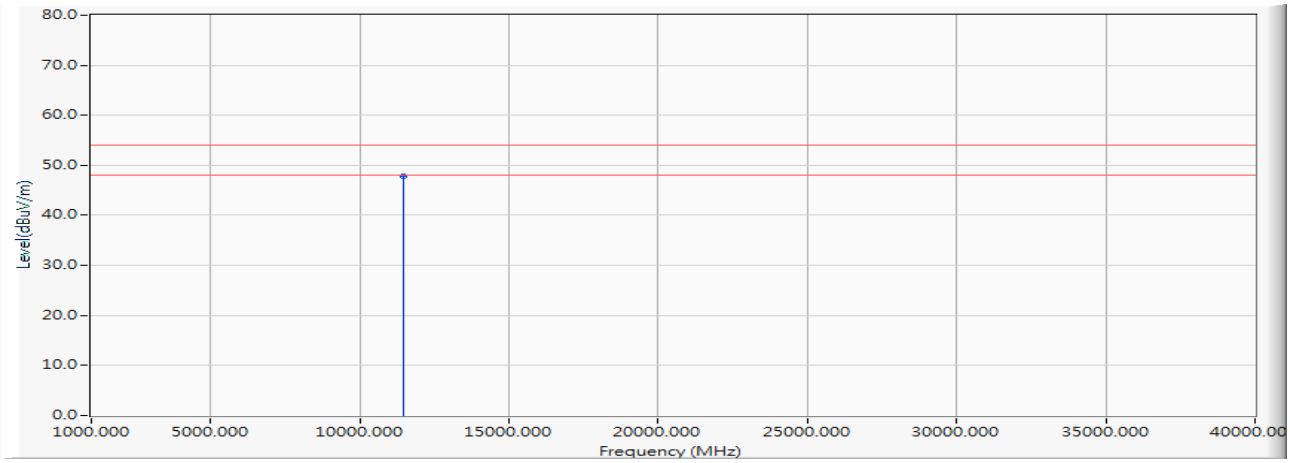
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	47.945	64.615	-9.385	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.8)

Vertical



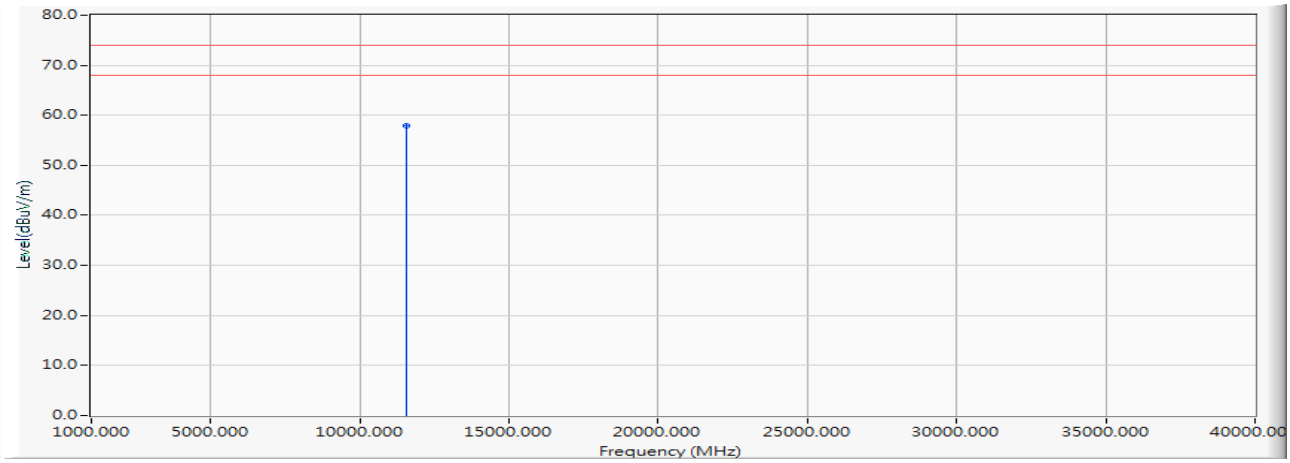
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	31.115	47.785	-6.215	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Horizontal



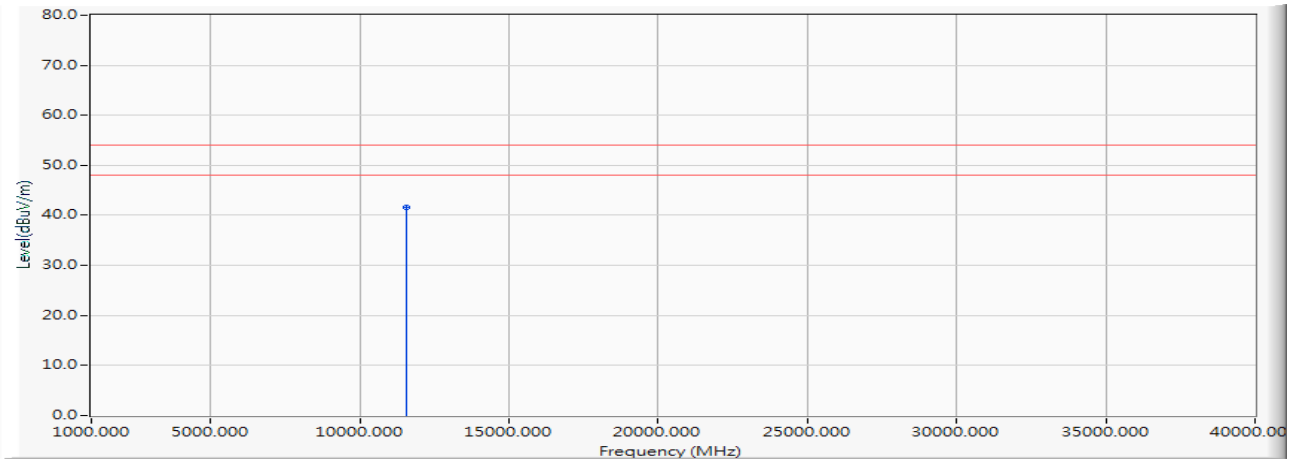
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	41.300	57.918	-16.082	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Horizontal



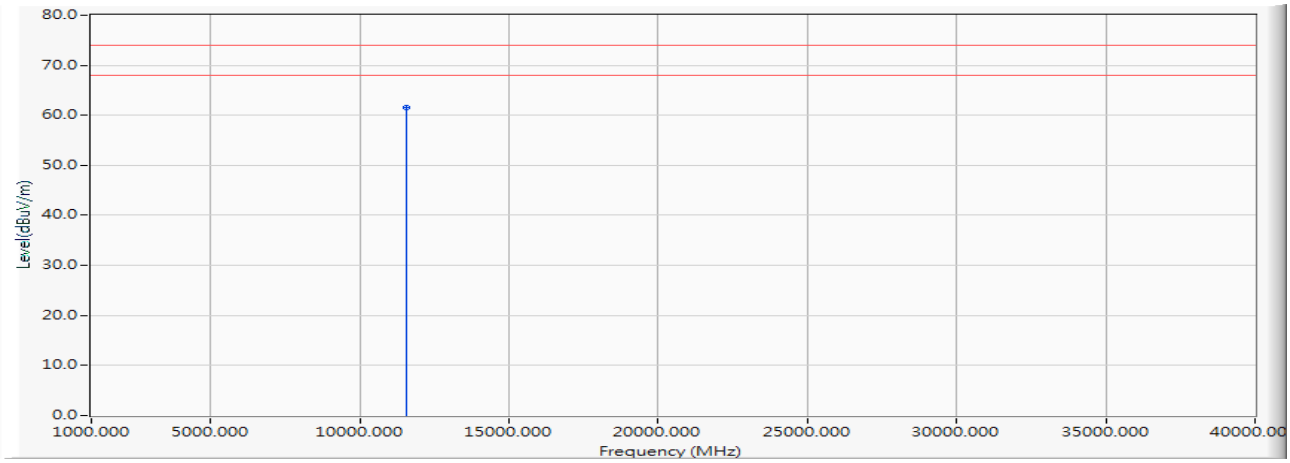
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	24.970	41.588	-12.412	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Vertical



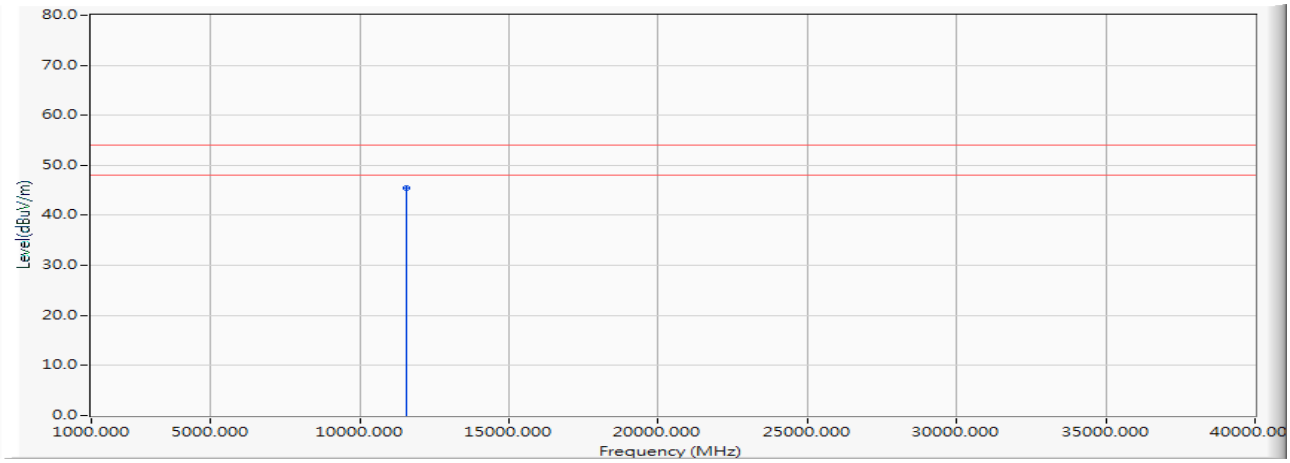
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	44.868	61.486	-12.514	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Vertical



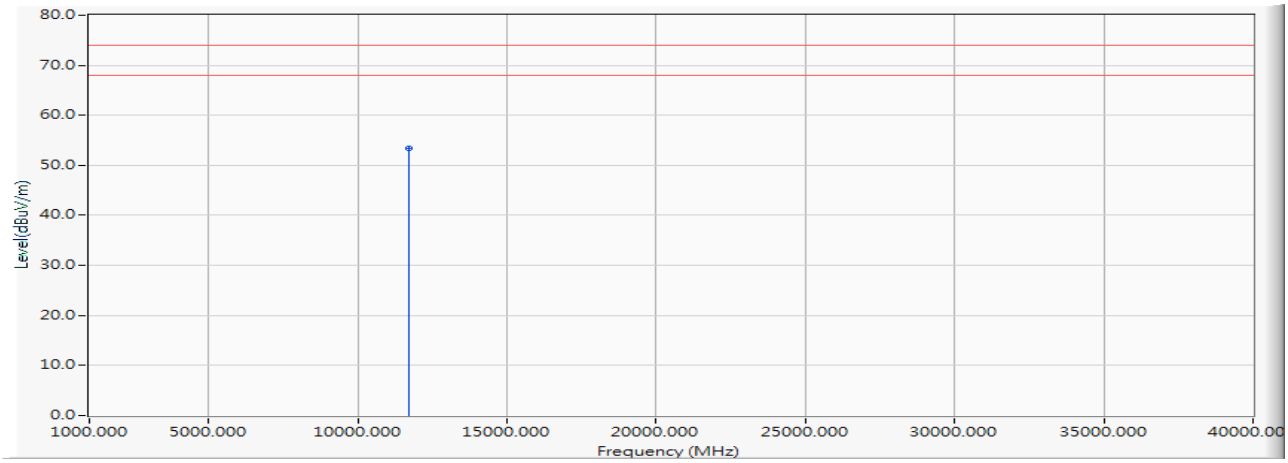
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	28.958	45.576	-8.424	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.8)

Horizontal



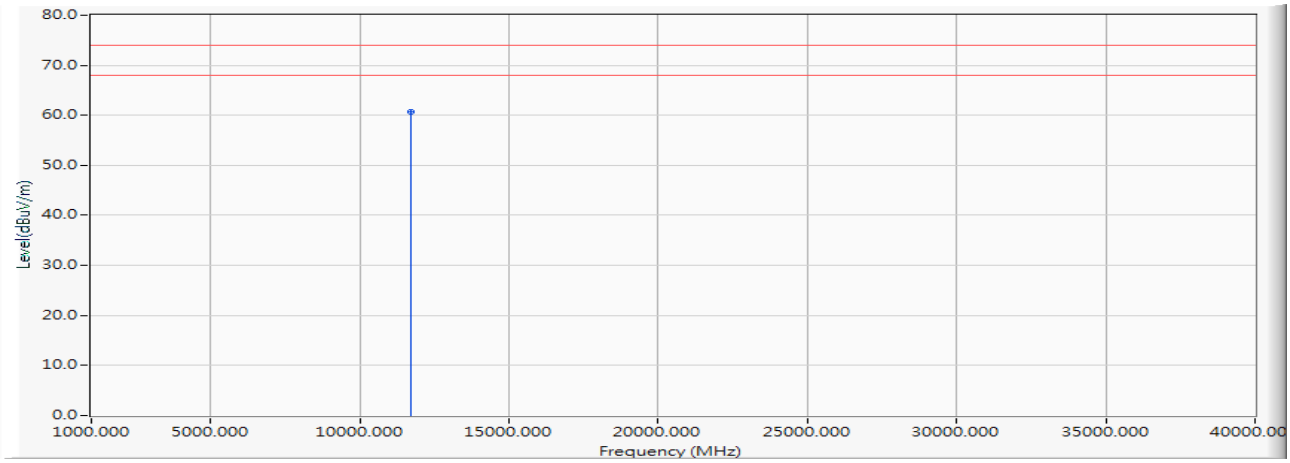
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	36.420	53.351	-20.649	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.8)

Vertical



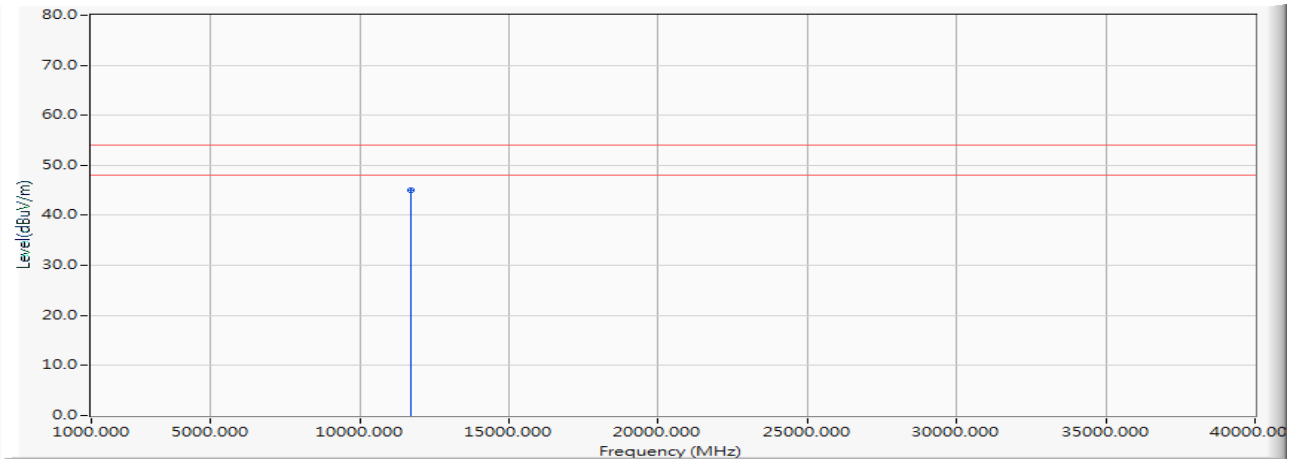
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	43.797	60.728	-13.272	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.8)

Vertical



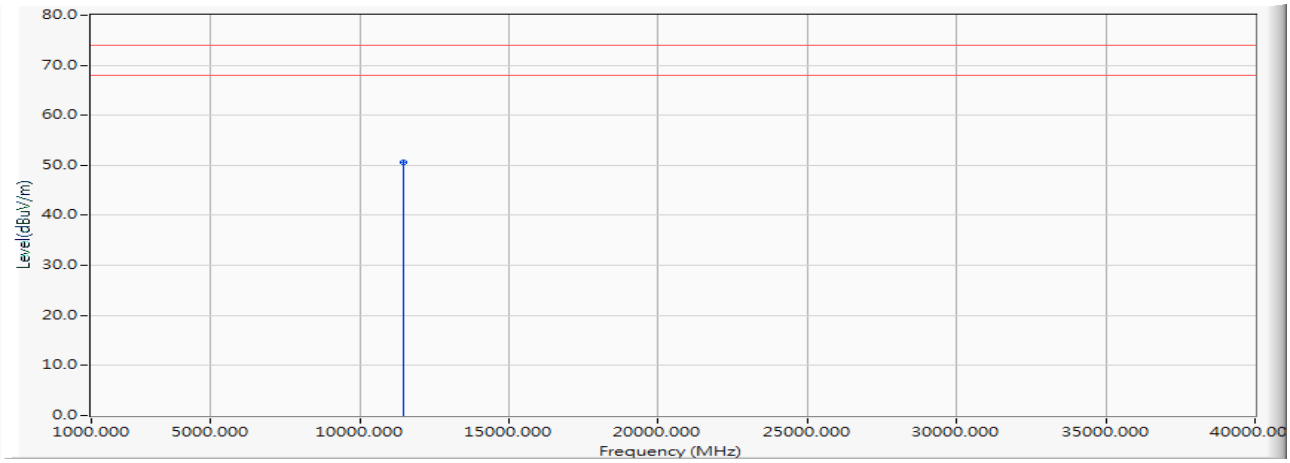
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	28.097	45.028	-8.972	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.8)

Horizontal



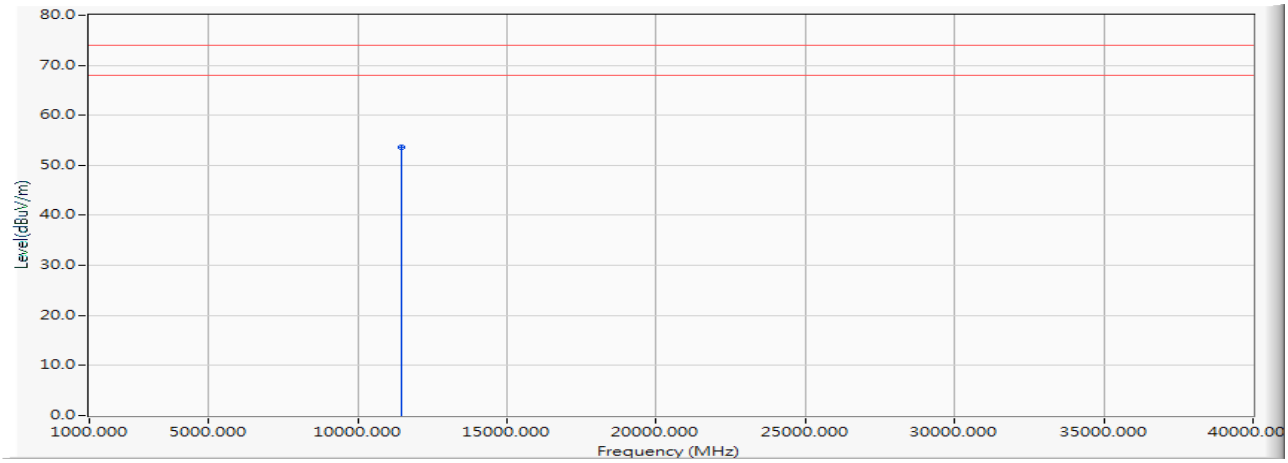
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	34.061	50.551	-23.449	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.8)

Vertical



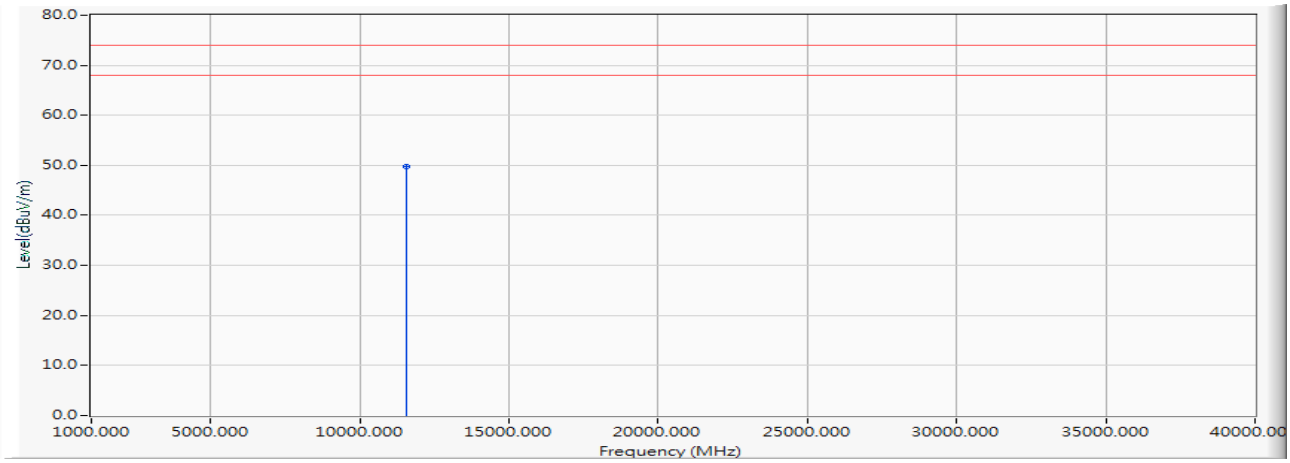
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	37.113	53.603	-20.397	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.8)

Horizontal



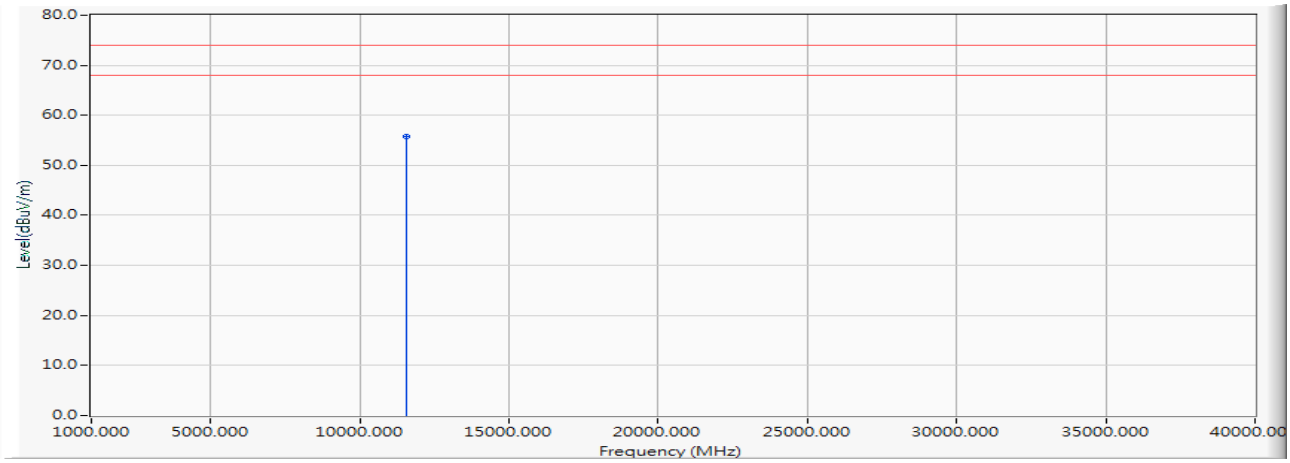
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	33.079	49.729	-24.271	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.8)

Vertical



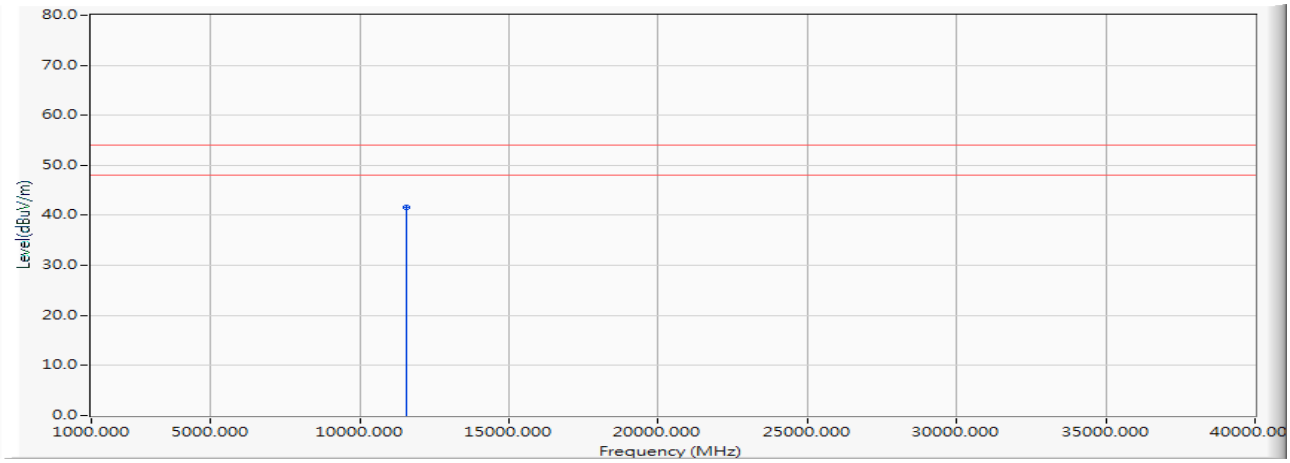
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	39.090	55.740	-18.260	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.8)

Vertical



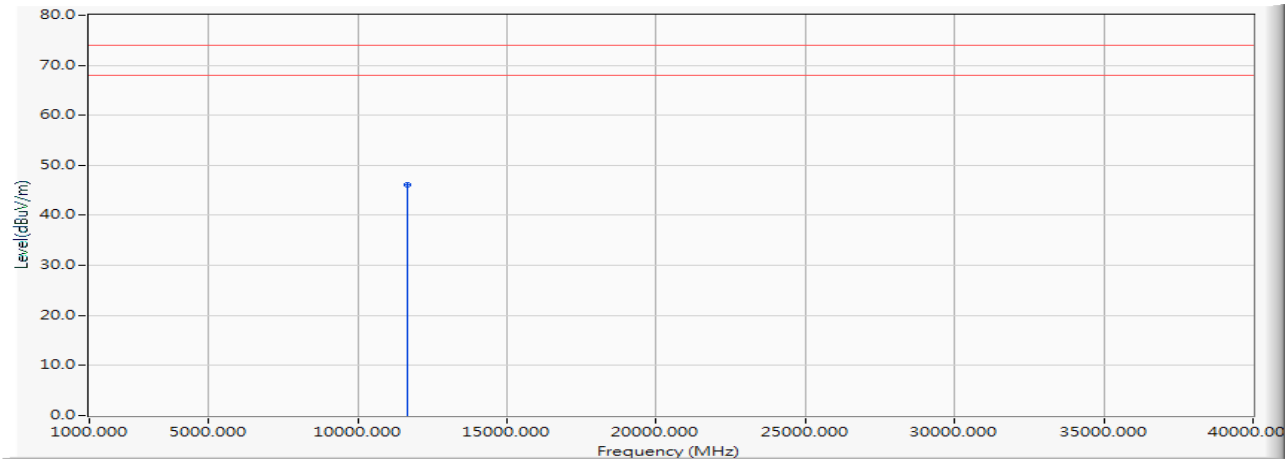
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	25.020	41.670	-12.330	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.8)

Horizontal



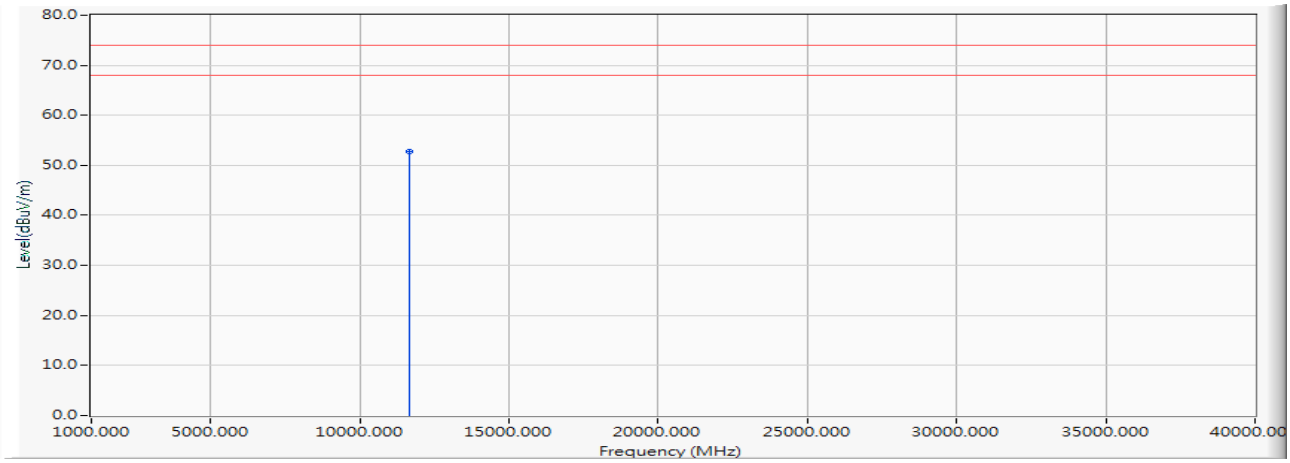
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	29.307	46.206	-27.794	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.8)

Vertical



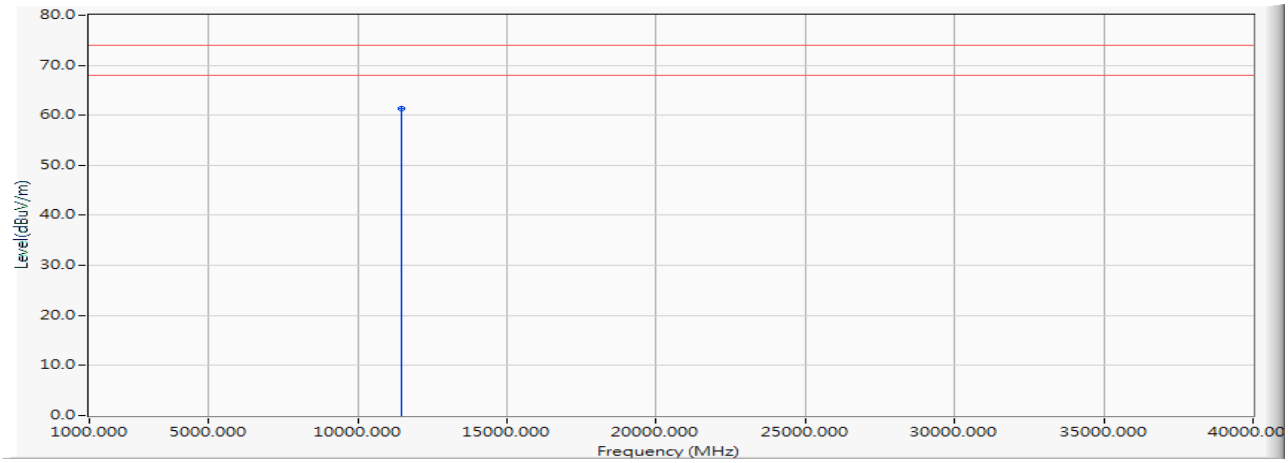
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	35.770	52.669	-21.331	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.9)

Horizontal



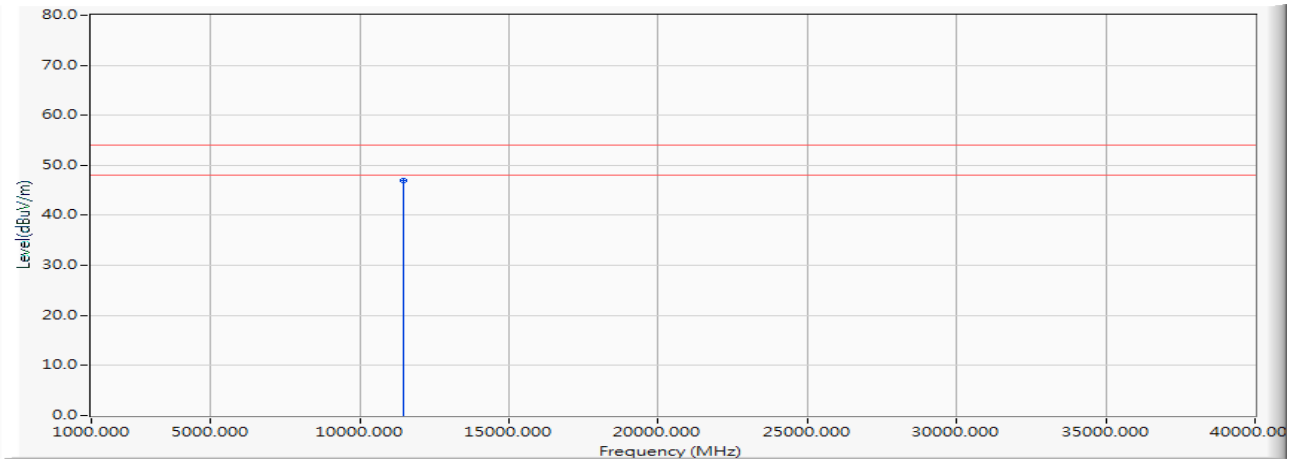
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	44.759	61.429	-12.571	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.9)

Horizontal



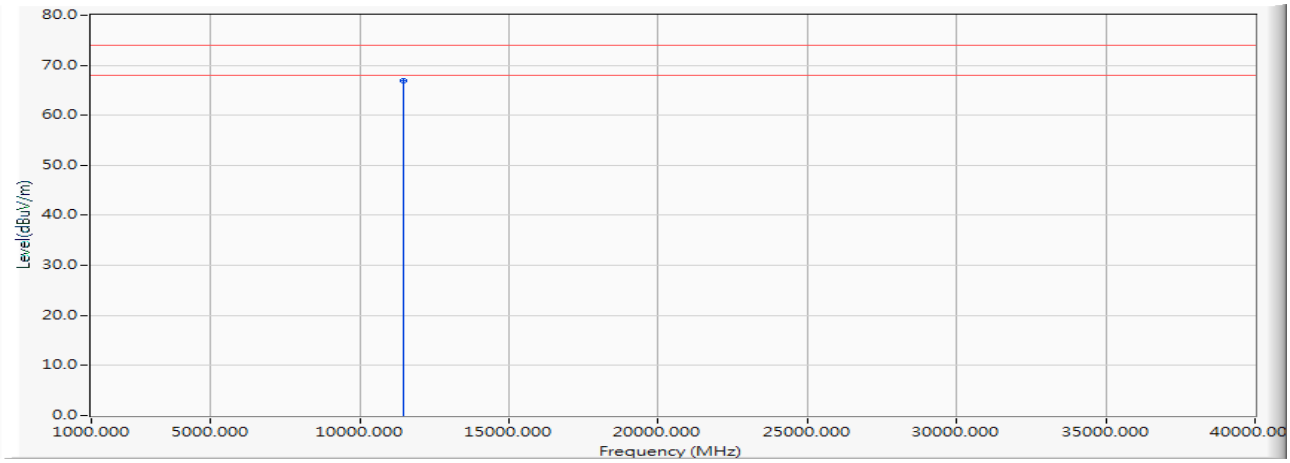
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	30.279	46.949	-7.051	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.9)

Vertical



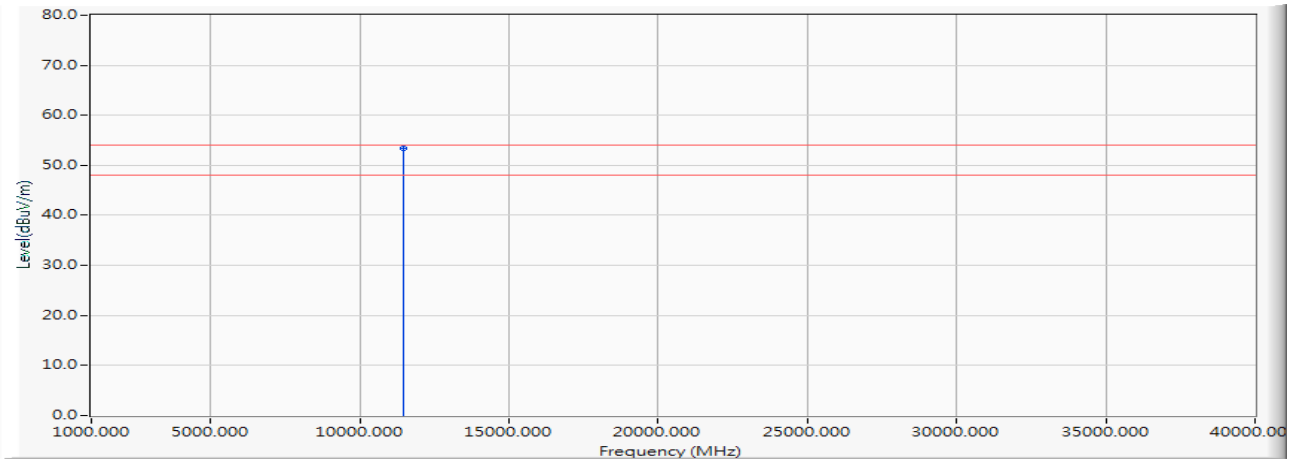
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	50.265	66.935	-7.065	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz) (Antenna No.9)

Vertical



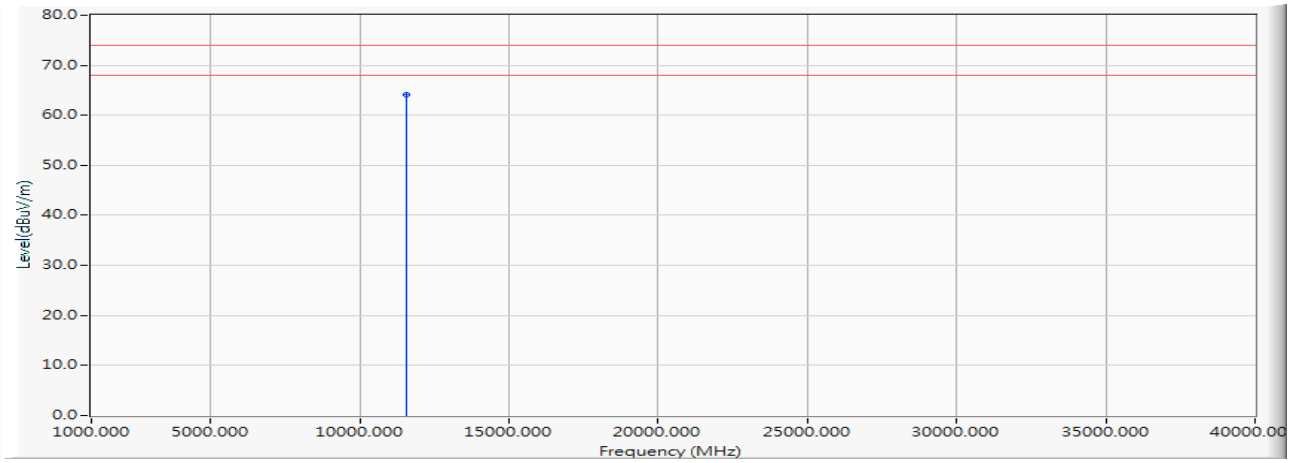
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11460.000	16.670	36.785	53.455	-0.545	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Horizontal



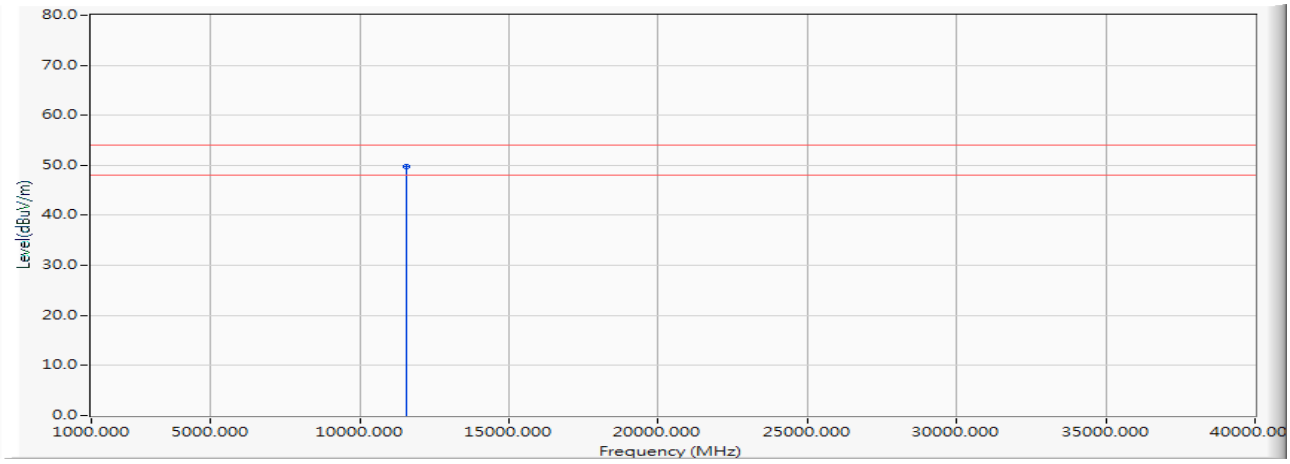
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	47.480	64.098	-9.902	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Horizontal



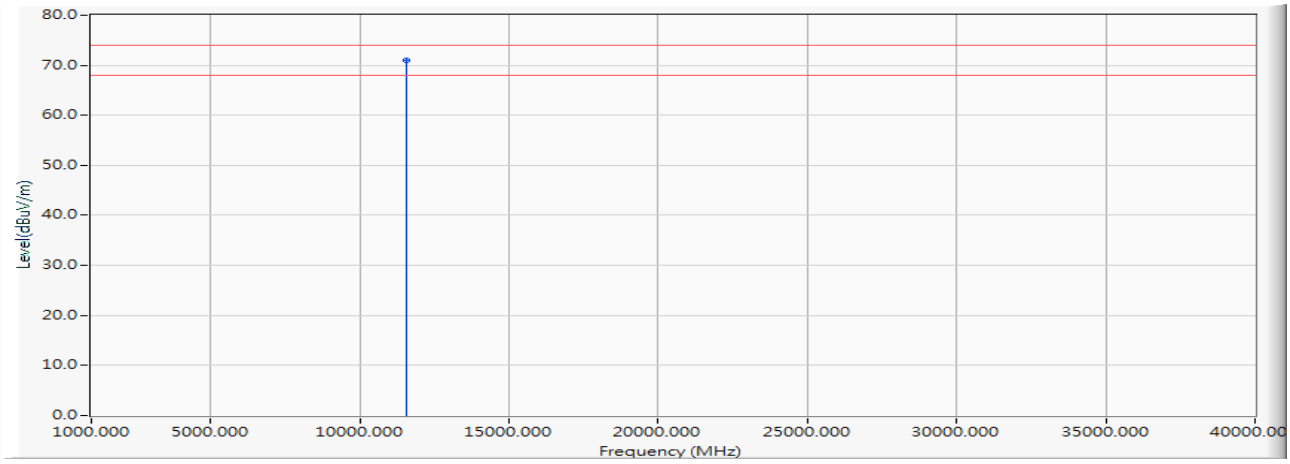
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	33.080	49.698	-4.302	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Vertical



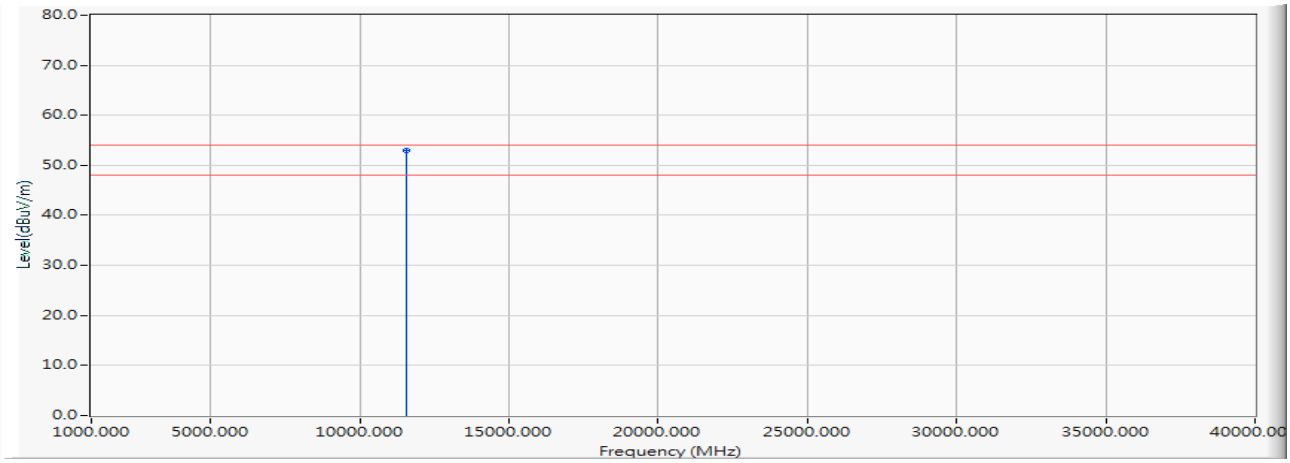
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	54.358	70.976	-3.024	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Vertical



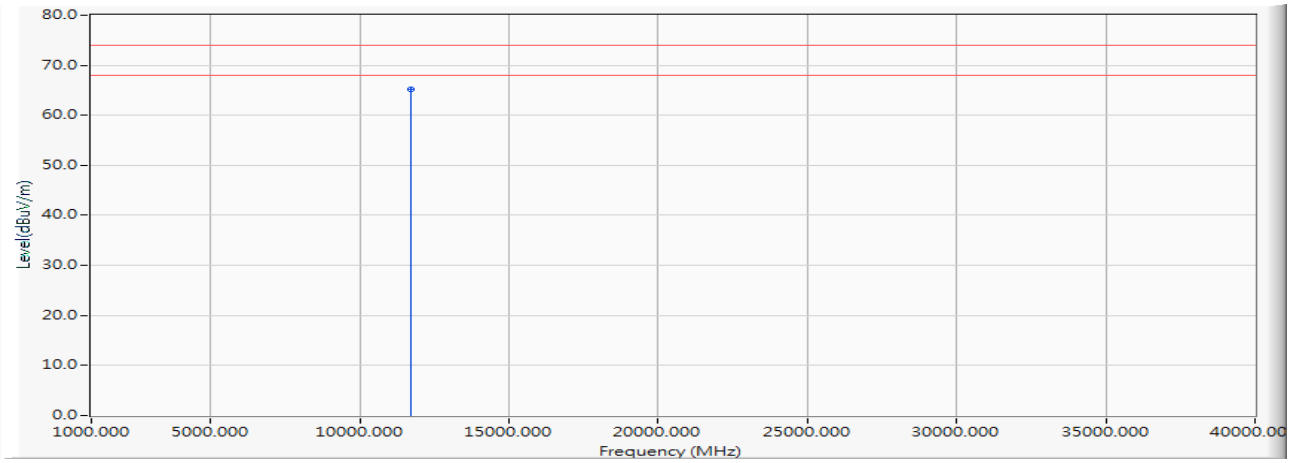
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11570.000	16.618	36.458	53.076	-0.924	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.9)

Horizontal



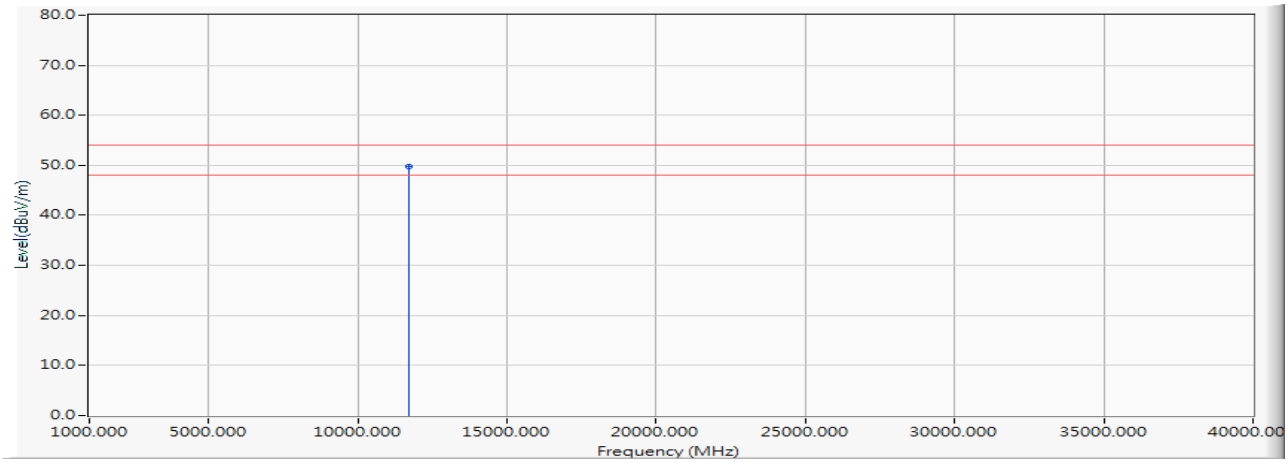
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	48.260	65.191	-8.809	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.9)

Horizontal



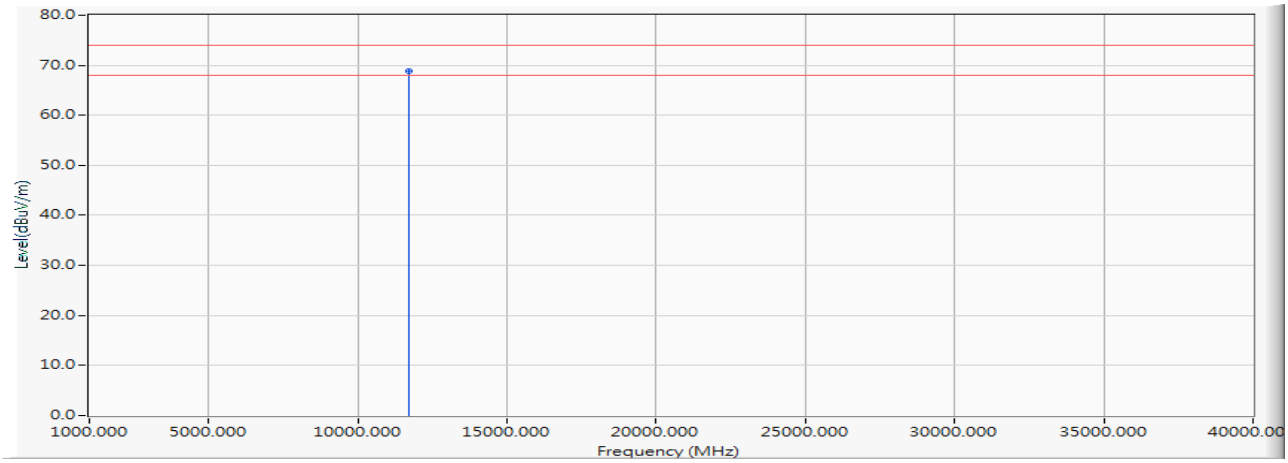
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	32.810	49.741	-4.259	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.9)

Vertical



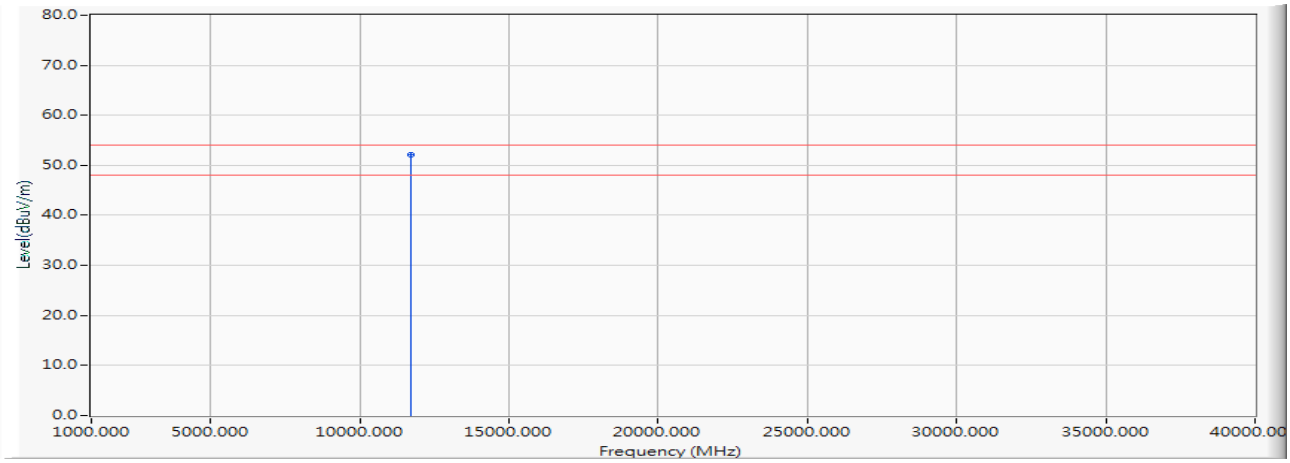
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	52.017	68.948	-5.052	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) (Antenna No.9)

Vertical



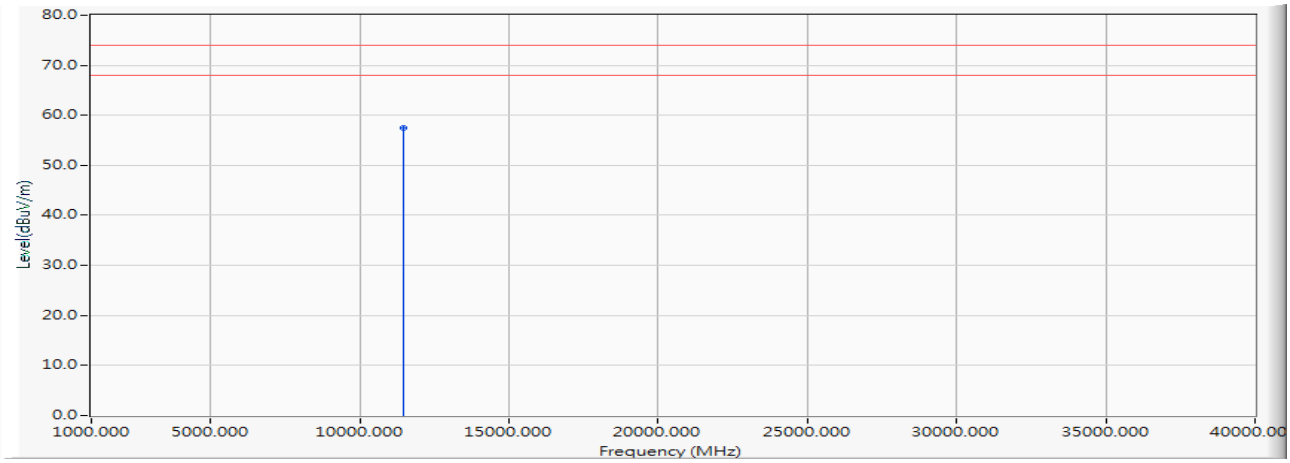
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11690.000	16.930	35.197	52.128	-1.872	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.9)

Horizontal



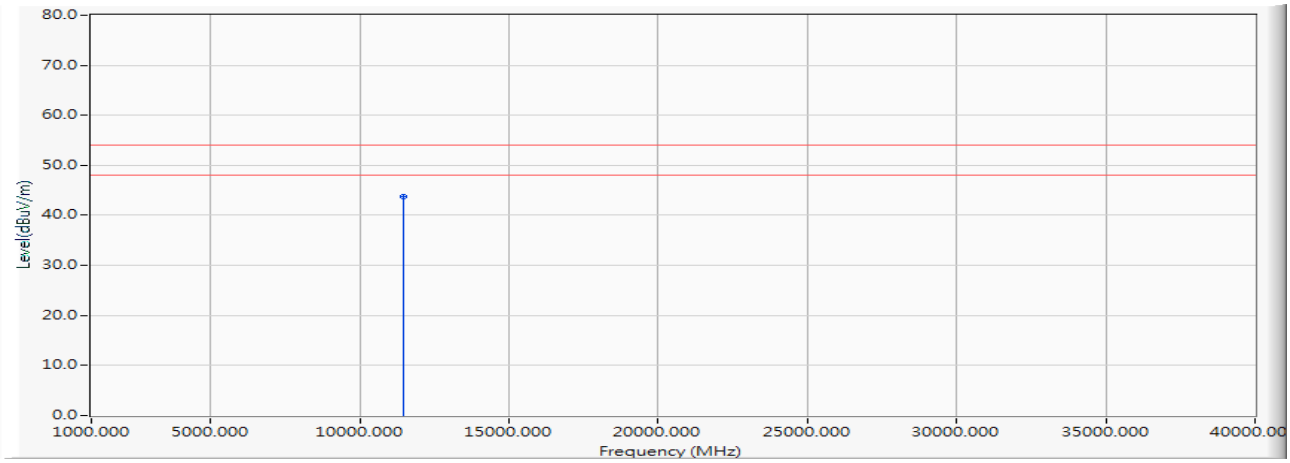
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	40.991	57.481	-16.519	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.9)

Horizontal



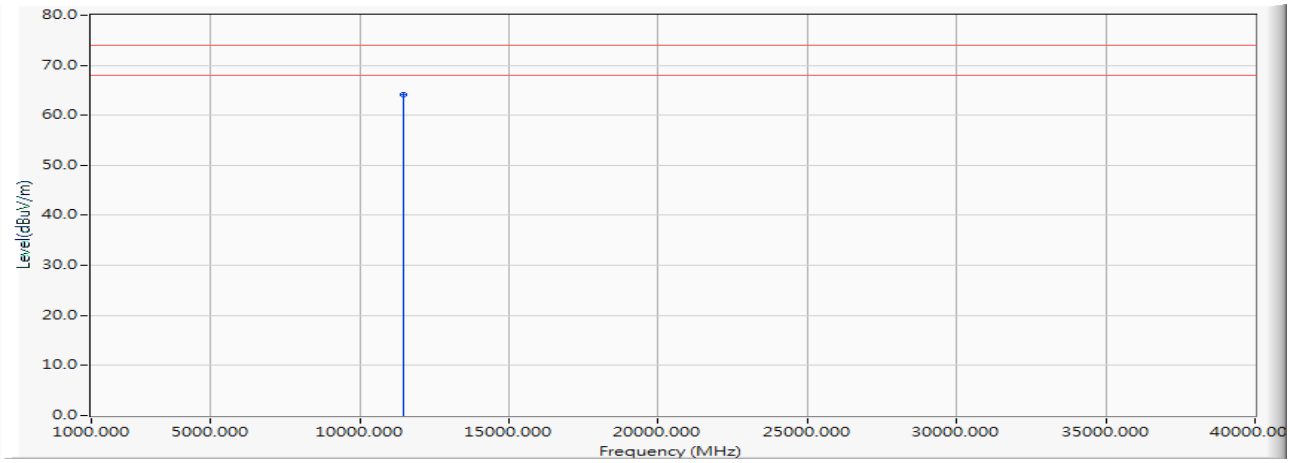
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	27.171	43.661	-10.339	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.9)

Vertical



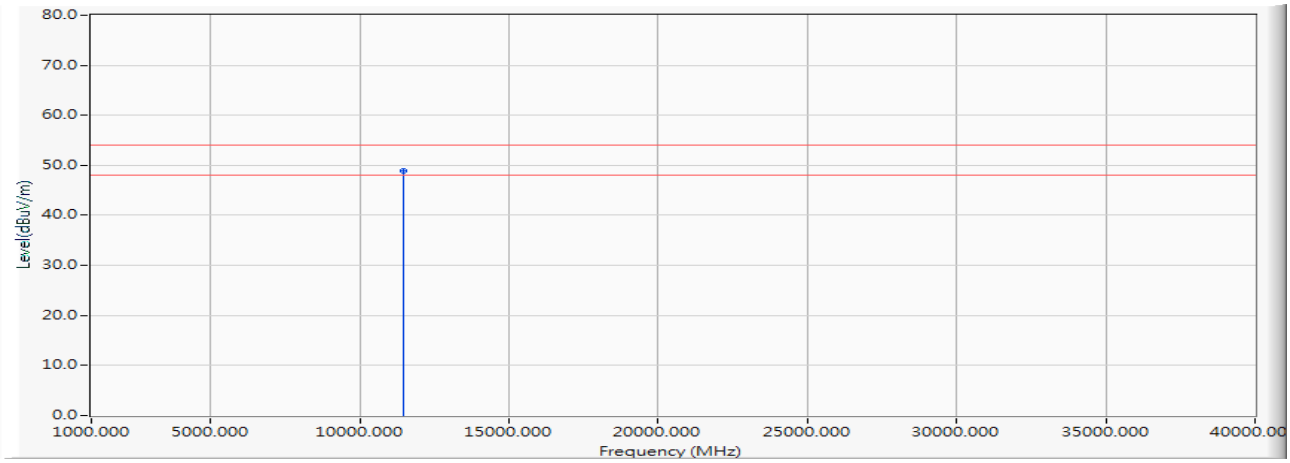
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	47.603	64.093	-9.907	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5740MHz) (Antenna No.9)

Vertical



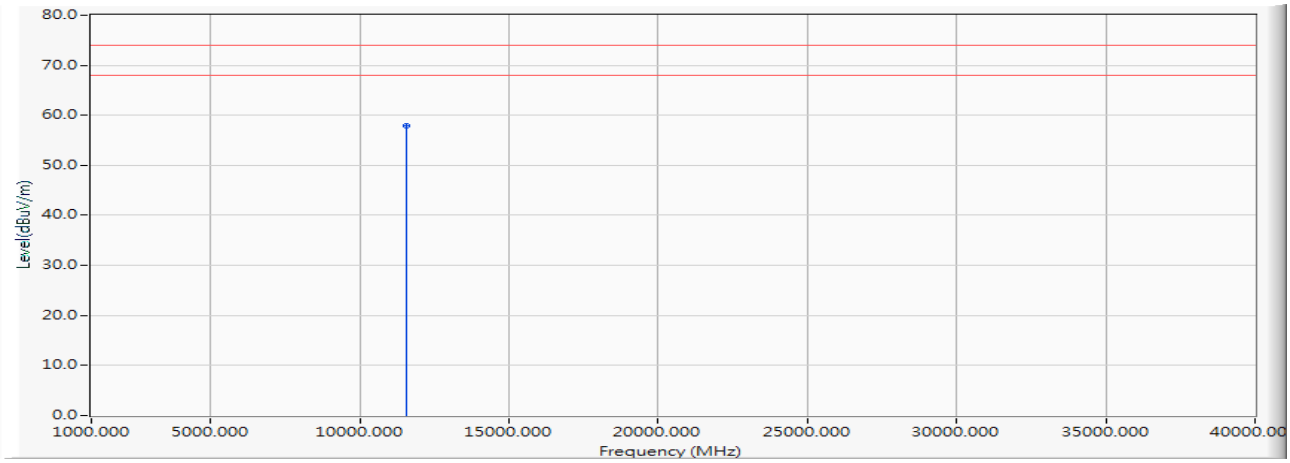
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11480.000	16.490	32.483	48.973	-5.027	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Horizontal



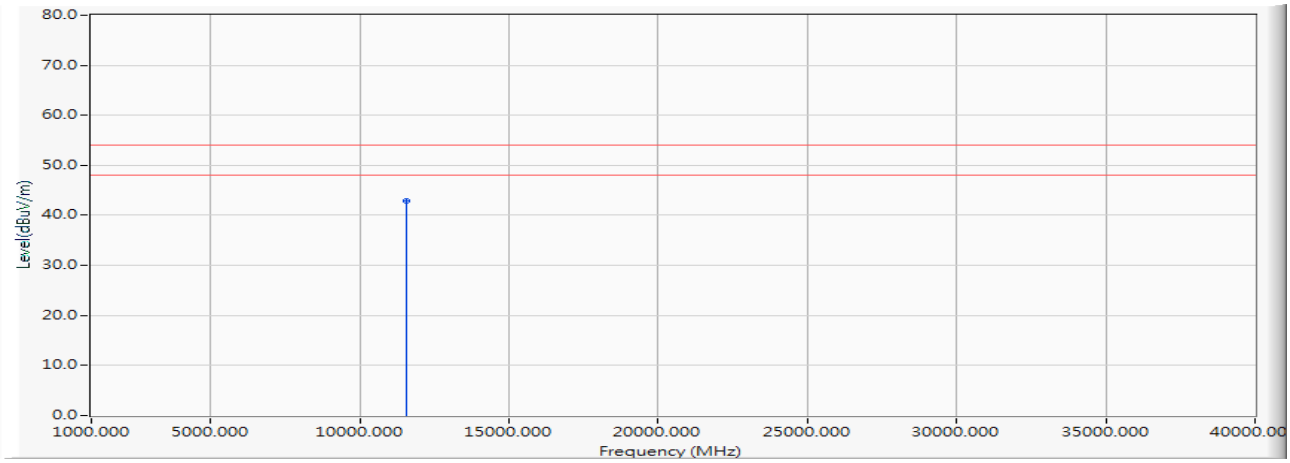
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	41.159	57.809	-16.191	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Horizontal



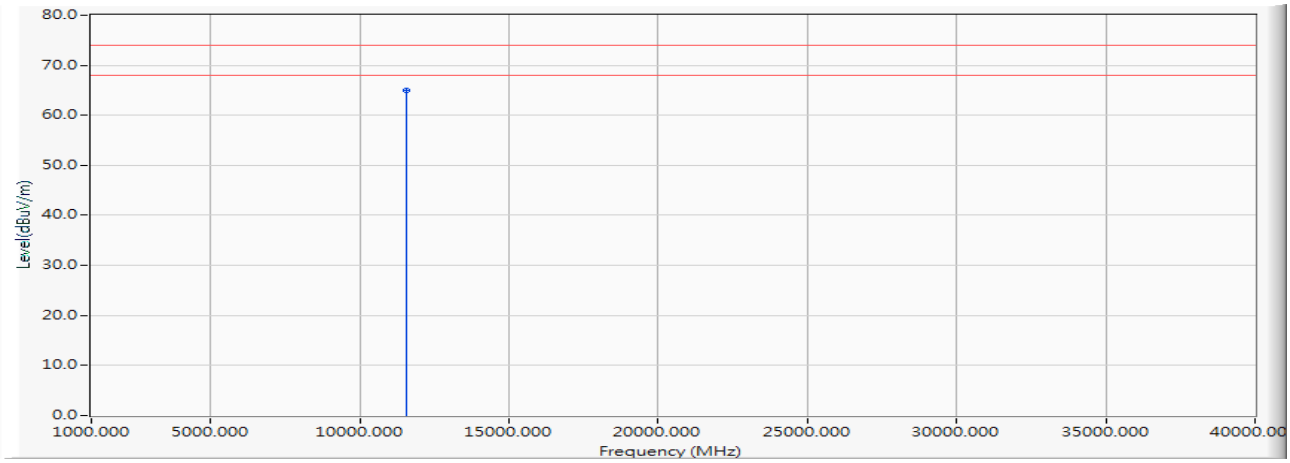
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	26.249	42.899	-11.101	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Vertical



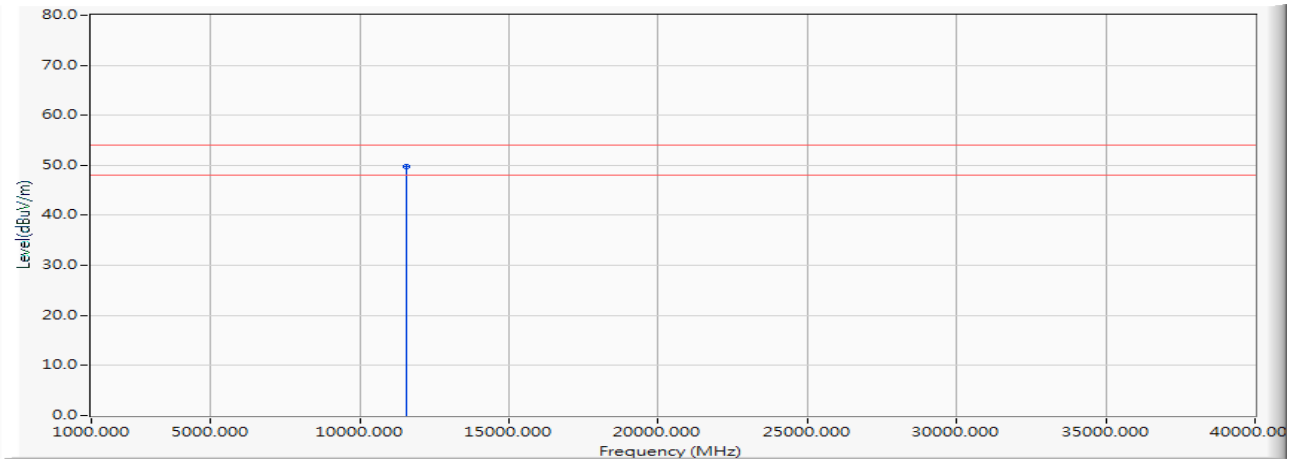
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	48.350	65.000	-9.000	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Vertical



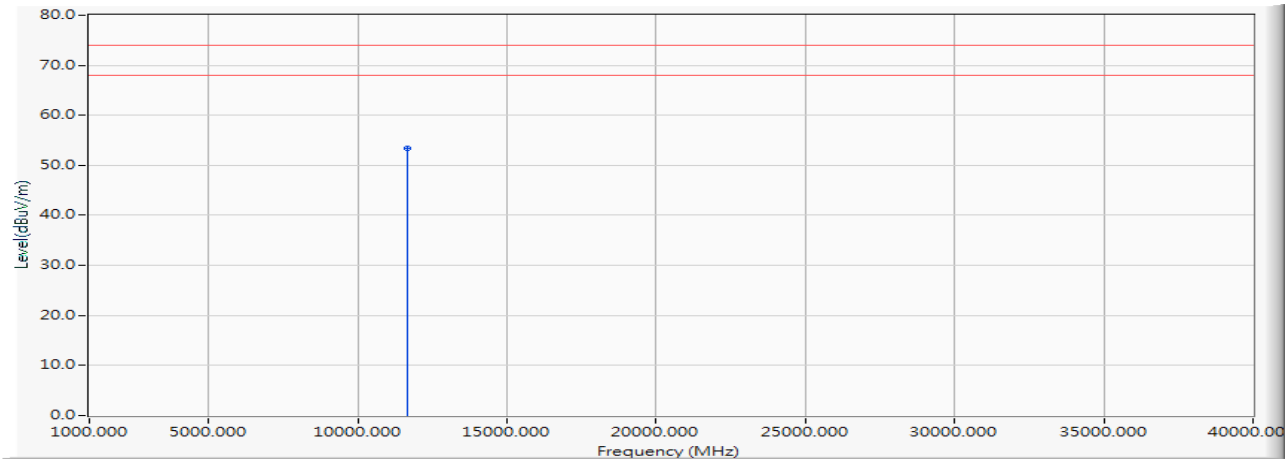
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11560.000	16.650	33.040	49.690	-4.310	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.9)

Horizontal



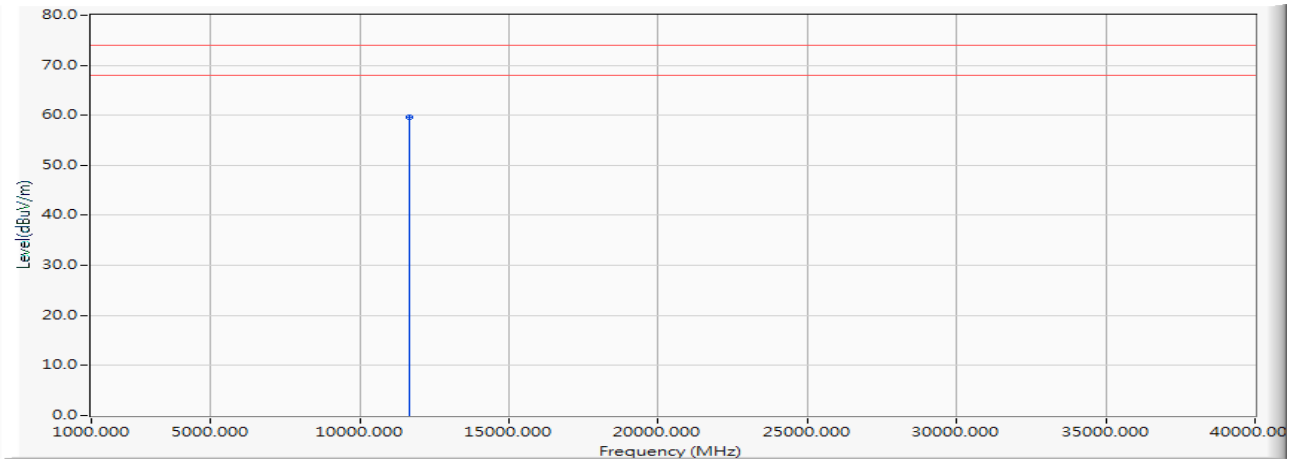
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	36.577	53.476	-20.524	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/28
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.9)

Vertical



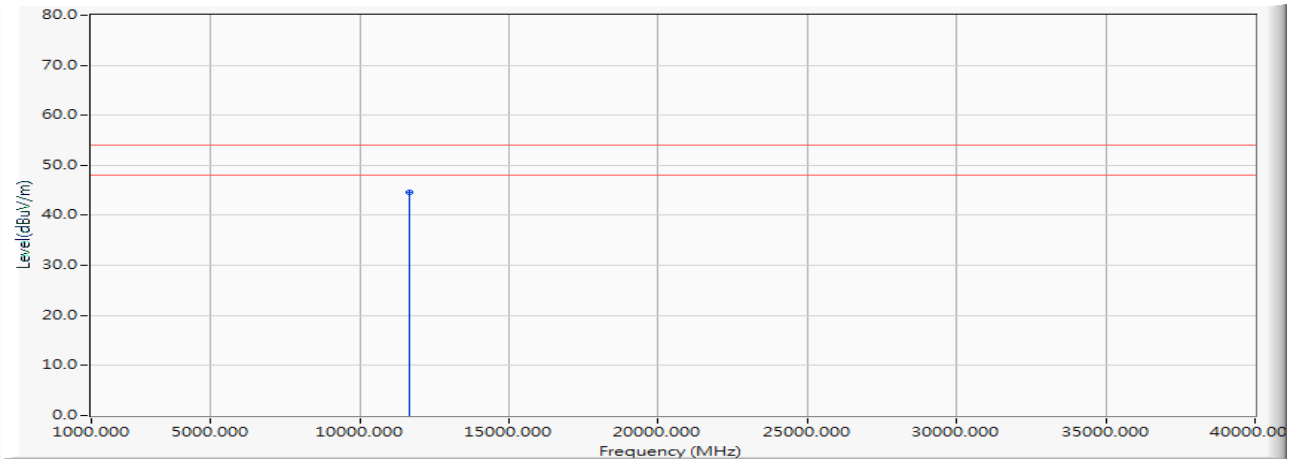
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	42.800	59.699	-14.301	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/03/28
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) (Antenna No.9)

Vertical



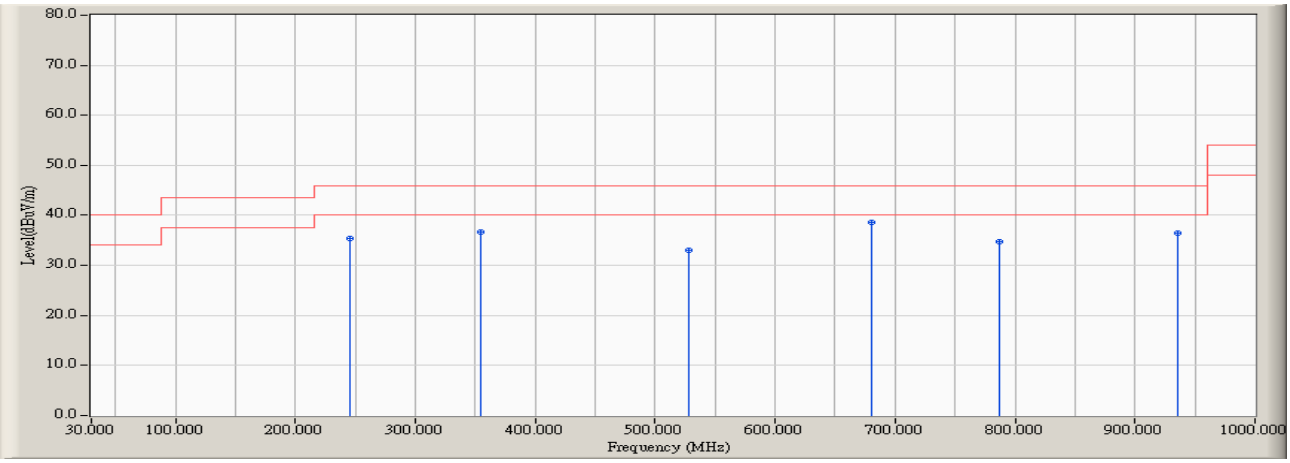
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	11680.000	16.899	27.730	44.629	-9.371	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Horizontal



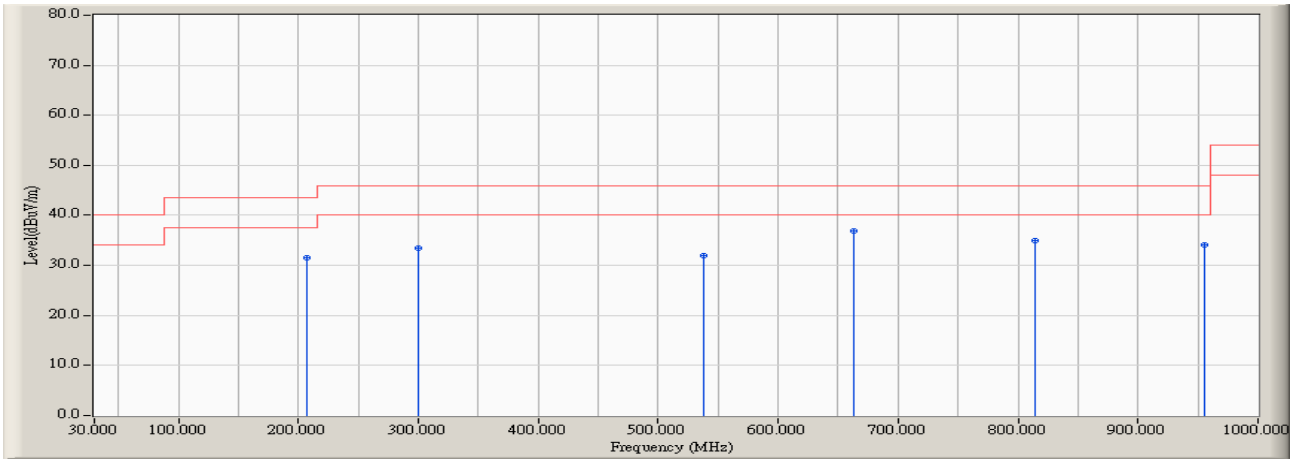
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		245.340	0.149	35.250	35.399	-10.601	46.000	QUASIPEAK
2		353.980	3.532	33.189	36.721	-9.279	46.000	QUASIPEAK
3		528.580	7.282	25.700	32.982	-13.018	46.000	QUASIPEAK
4	*	679.900	9.277	29.263	38.540	-7.460	46.000	QUASIPEAK
5		786.600	10.623	24.158	34.781	-11.219	46.000	QUASIPEAK
6		935.980	12.712	23.654	36.366	-9.634	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.7)

Vertical



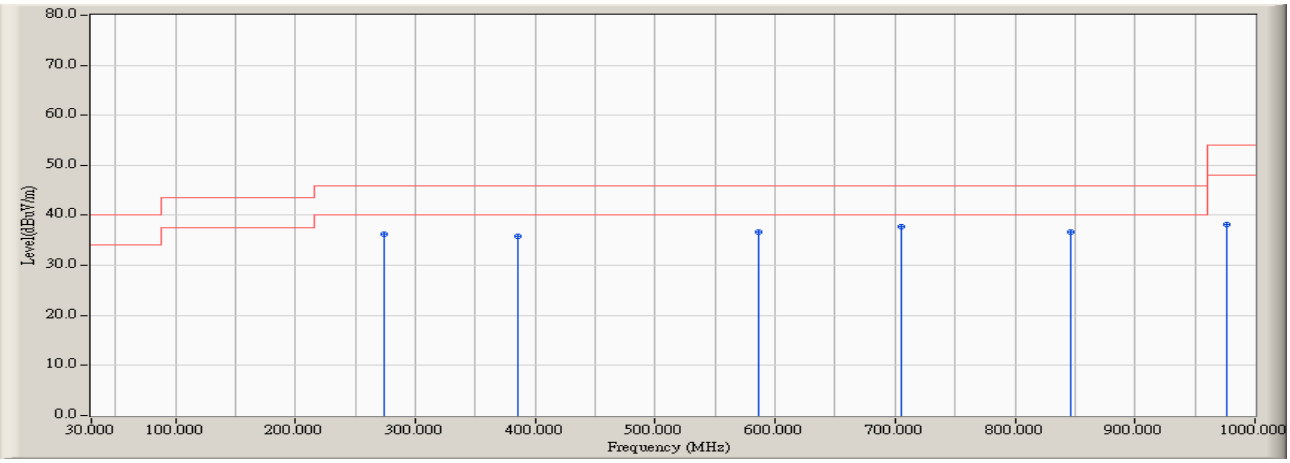
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		206.540	-2.081	33.541	31.460	-12.040	43.500	QUASIPEAK
2		299.660	1.630	31.791	33.421	-12.579	46.000	QUASIPEAK
3		538.280	7.494	24.475	31.969	-14.031	46.000	QUASIPEAK
4	*	662.440	9.198	27.645	36.843	-9.157	46.000	QUASIPEAK
5		813.760	11.038	24.002	35.040	-10.960	46.000	QUASIPEAK
6		955.380	13.000	21.177	34.177	-11.823	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/04/10
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Horizontal



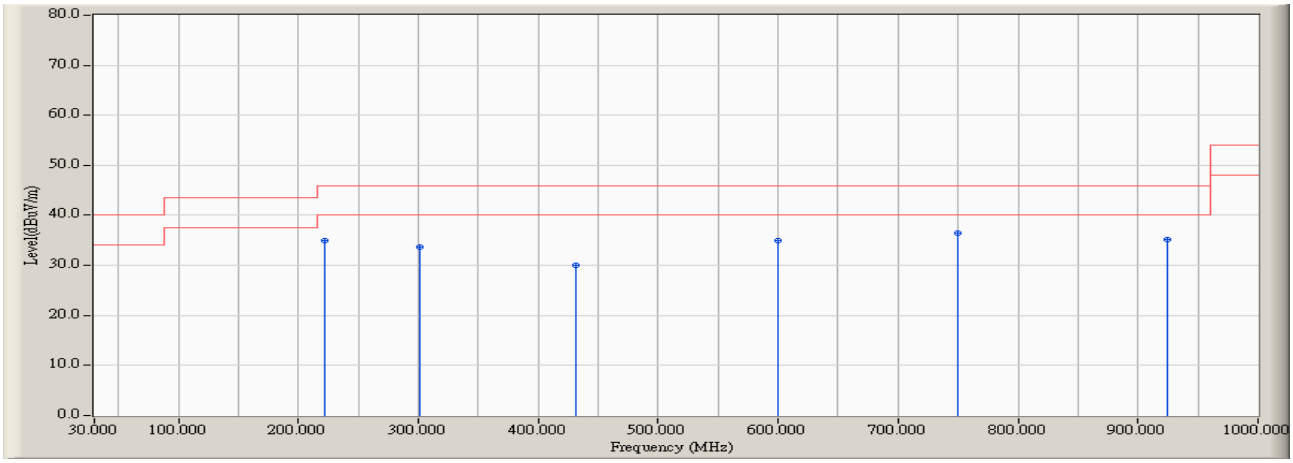
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		274.440	1.082	35.079	36.161	-9.839	46.000	QUASIPEAK
2		385.020	4.503	31.409	35.912	-10.088	46.000	QUASIPEAK
3		586.780	8.180	28.429	36.609	-9.391	46.000	QUASIPEAK
4	*	705.120	9.451	28.331	37.782	-8.218	46.000	QUASIPEAK
5		846.740	11.683	24.897	36.580	-9.420	46.000	QUASIPEAK
6		976.720	13.197	25.072	38.269	-15.731	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/04/10
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.7)

Vertical



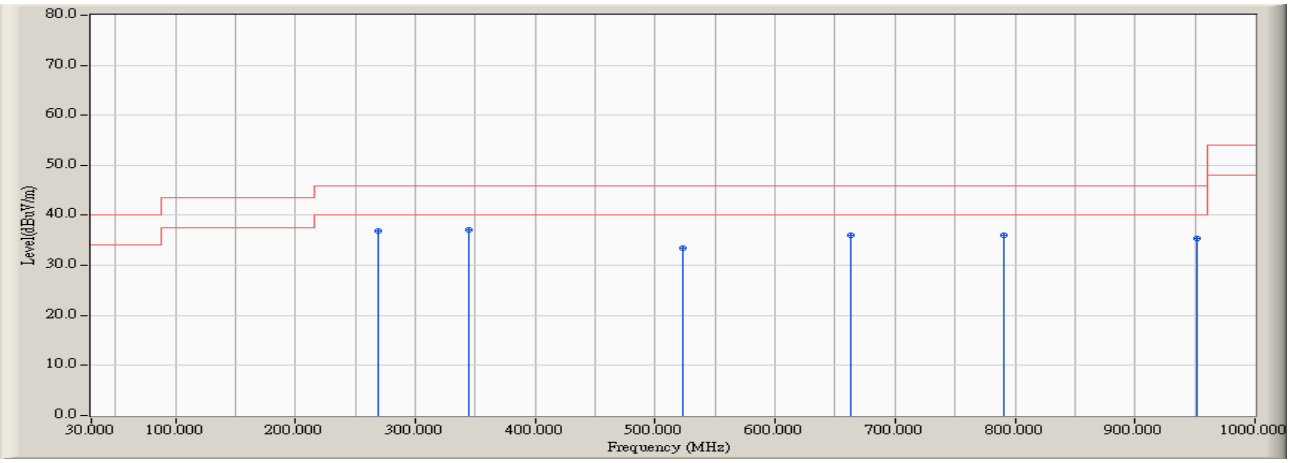
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		222.060	-1.832	36.718	34.886	-11.114	46.000	QUASIPEAK
2		301.600	1.697	32.043	33.740	-12.260	46.000	QUASIPEAK
3		431.580	5.474	24.451	29.925	-16.075	46.000	QUASIPEAK
4		600.360	8.332	26.559	34.891	-11.109	46.000	QUASIPEAK
5	*	749.740	10.221	26.179	36.400	-9.600	46.000	QUASIPEAK
6		924.340	12.513	22.735	35.248	-10.752	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Horizontal



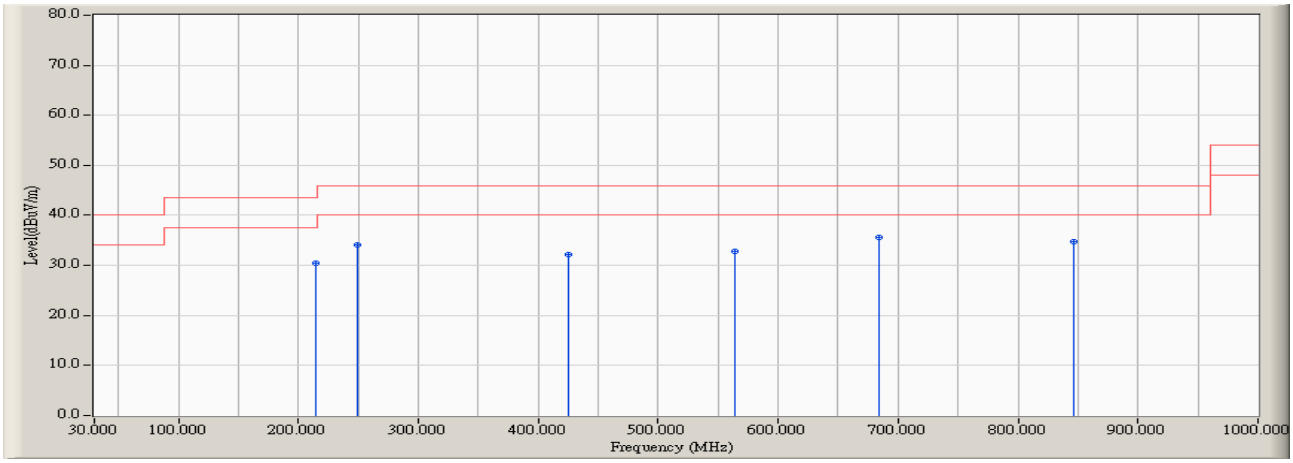
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		268.620	1.100	35.748	36.848	-9.152	46.000	QUASIPEAK
2	*	344.280	3.220	33.975	37.195	-8.805	46.000	QUASIPEAK
3		522.760	7.163	26.194	33.357	-12.643	46.000	QUASIPEAK
4		662.440	9.198	26.817	36.015	-9.985	46.000	QUASIPEAK
5		790.480	10.660	25.347	36.007	-9.993	46.000	QUASIPEAK
6		951.500	12.961	22.499	35.460	-10.540	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.8)

Vertical



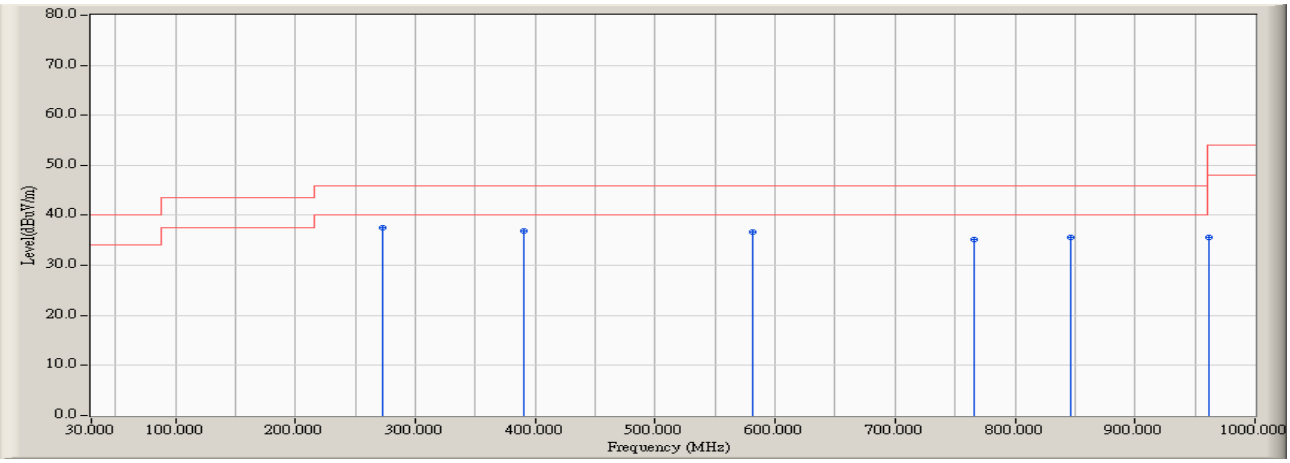
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		214.300	-1.942	32.388	30.446	-13.054	43.500	QUASIPEAK
2		249.220	0.448	33.745	34.193	-11.807	46.000	QUASIPEAK
3		425.760	5.381	26.788	32.169	-13.831	46.000	QUASIPEAK
4		563.500	7.924	24.976	32.900	-13.100	46.000	QUASIPEAK
5	*	683.780	9.295	26.265	35.560	-10.440	46.000	QUASIPEAK
6		846.740	11.683	23.037	34.720	-11.280	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.8)

Horizontal



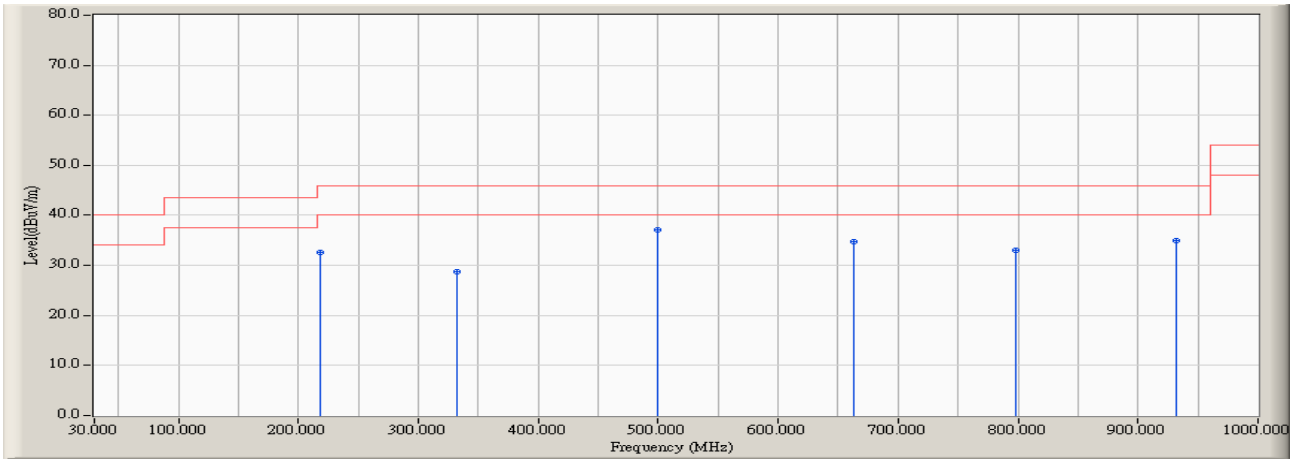
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	272.500	1.045	36.451	37.496	-8.504	46.000	QUASIPEAK
2		390.840	4.685	32.188	36.873	-9.127	46.000	QUASIPEAK
3		580.960	8.120	28.546	36.666	-9.334	46.000	QUASIPEAK
4		765.260	10.369	24.765	35.134	-10.866	46.000	QUASIPEAK
5		846.740	11.683	23.872	35.555	-10.445	46.000	QUASIPEAK
6		961.200	13.053	22.451	35.504	-18.496	54.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.8)

Vertical



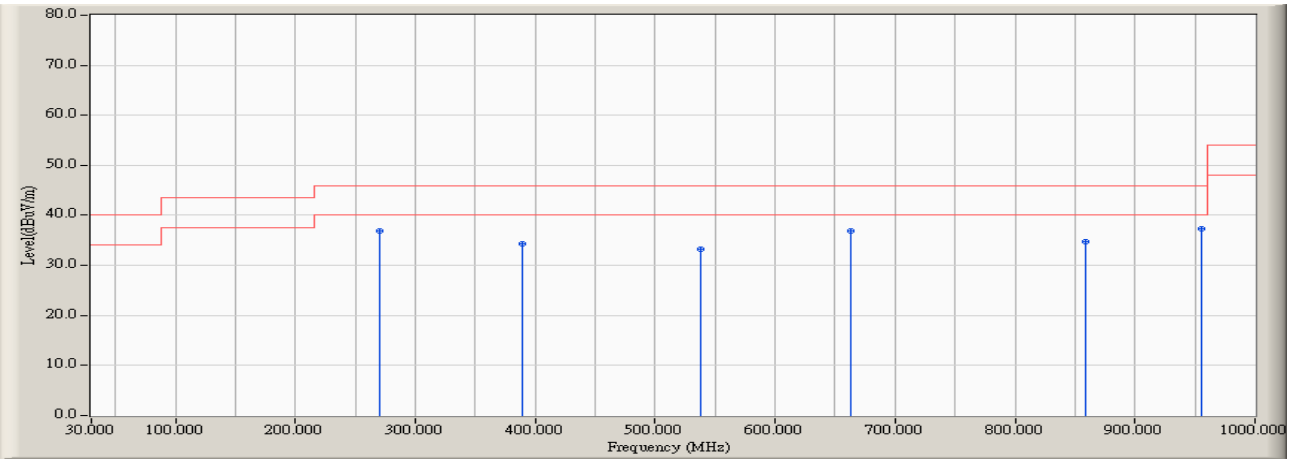
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		218.180	-1.957	34.608	32.651	-13.349	46.000	QUASIPEAK
2		332.640	2.802	26.017	28.819	-17.181	46.000	QUASIPEAK
3	*	499.480	6.683	30.374	37.057	-8.943	46.000	QUASIPEAK
4		662.440	9.198	25.587	34.785	-11.215	46.000	QUASIPEAK
5		798.240	10.743	22.276	33.019	-12.981	46.000	QUASIPEAK
6		932.100	12.646	22.338	34.984	-11.016	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Horizontal



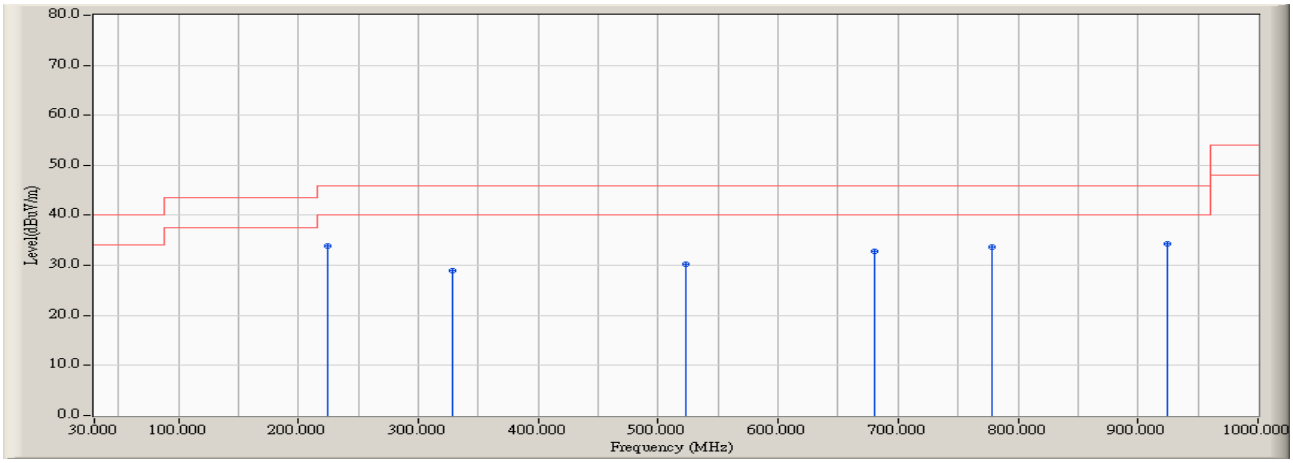
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		270.560	1.037	35.859	36.896	-9.104	46.000	QUASIPEAK
2		388.900	4.619	29.606	34.225	-11.775	46.000	QUASIPEAK
3		538.280	7.494	25.739	33.233	-12.767	46.000	QUASIPEAK
4		662.440	9.198	27.596	36.794	-9.206	46.000	QUASIPEAK
5		858.380	11.811	22.906	34.717	-11.283	46.000	QUASIPEAK
6	*	955.380	13.000	24.315	37.315	-8.685	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5785MHz) (Antenna No.9)

Vertical



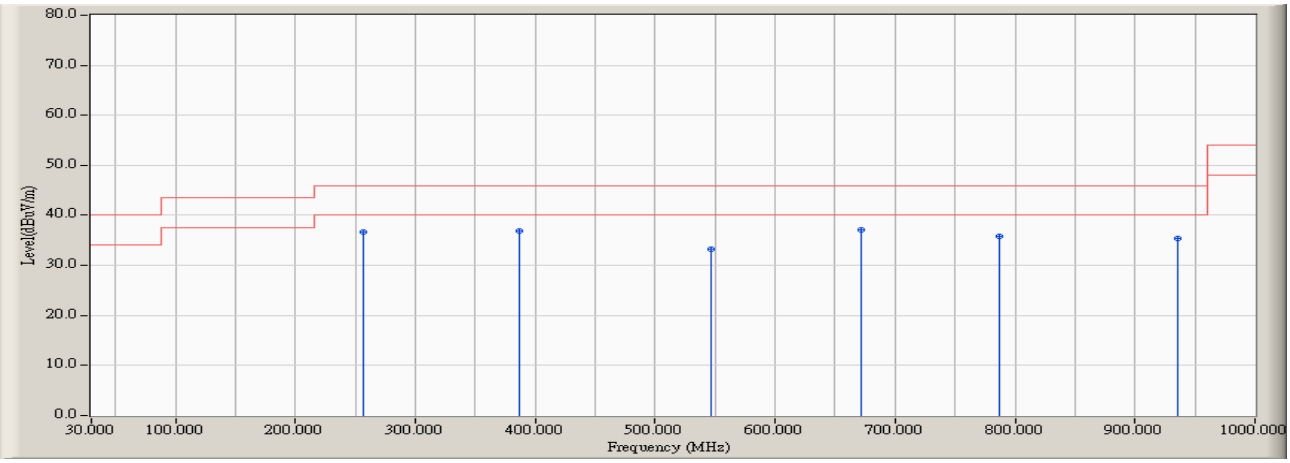
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		224.000	-1.704	35.539	33.835	-12.165	46.000	QUASIPEAK
2		328.760	2.661	26.346	29.007	-16.993	46.000	QUASIPEAK
3		522.760	7.163	23.085	30.248	-15.752	46.000	QUASIPEAK
4		679.900	9.277	23.496	32.773	-13.227	46.000	QUASIPEAK
5		778.840	10.524	23.196	33.720	-12.280	46.000	QUASIPEAK
6	*	924.340	12.513	21.735	34.248	-11.752	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/04/10
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Horizontal



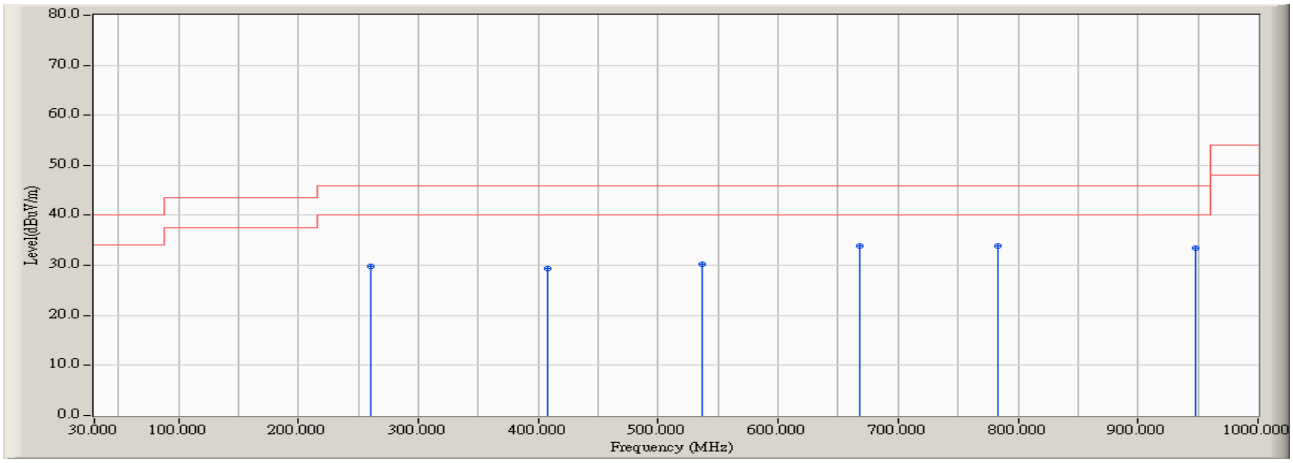
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		256.980	1.305	35.413	36.718	-9.282	46.000	QUASIPEAK
2		386.960	4.566	32.383	36.949	-9.051	46.000	QUASIPEAK
3		546.040	7.666	25.620	33.286	-12.714	46.000	QUASIPEAK
4	*	672.140	9.239	27.911	37.150	-8.850	46.000	QUASIPEAK
5		786.600	10.623	25.131	35.754	-10.246	46.000	QUASIPEAK
6		935.980	12.712	22.606	35.318	-10.682	46.000	QUASIPEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Moxa 2.4/4.9/5 GHz
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2019/04/10
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5780MHz) (Antenna No.9)

Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		260.860	1.594	28.120	29.714	-16.286	46.000	QUASIPEAK
2		408.300	5.111	24.186	29.297	-16.703	46.000	QUASIPEAK
3		536.340	7.449	22.760	30.209	-15.791	46.000	QUASIPEAK
4		668.260	9.221	24.650	33.871	-12.129	46.000	QUASIPEAK
5	*	782.720	10.574	23.324	33.898	-12.102	46.000	QUASIPEAK
6		947.620	12.913	20.585	33.498	-12.502	46.000	QUASIPEAK

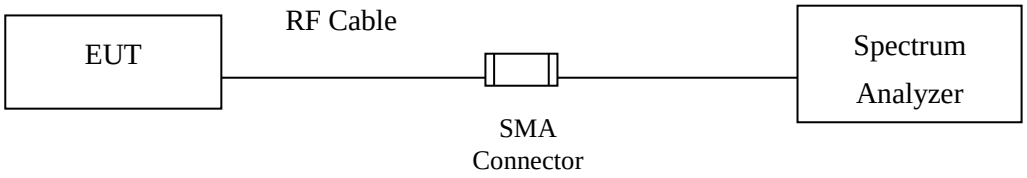
Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

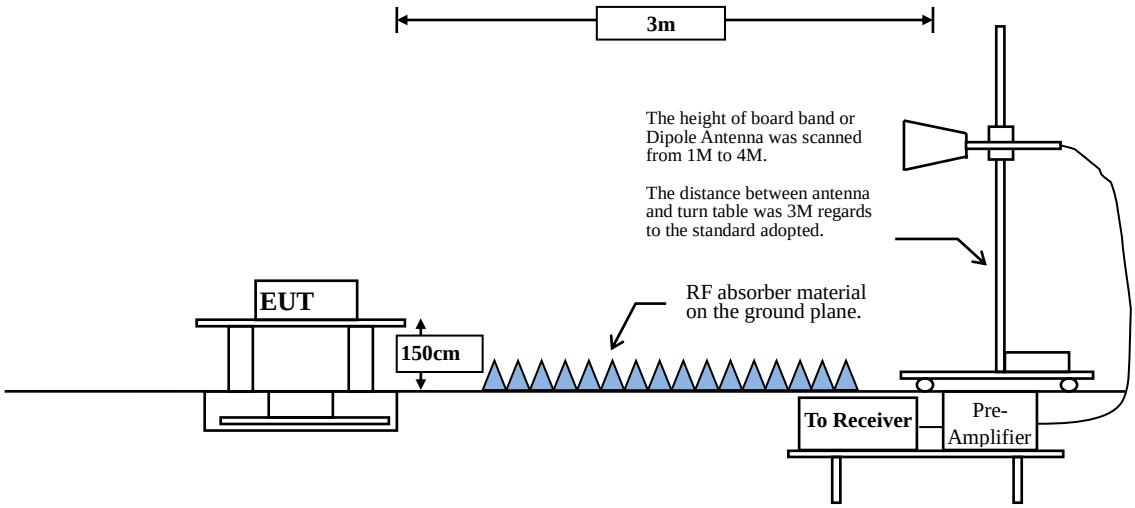
6. Band Edge

6.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBμV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBμV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5.8GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
5MHz	92.24	7.7536	129	200
20MHz	86.45	1.9420	515	1000

Note: Duty Cycle Refer to Section 8

6.4. Uncertainty

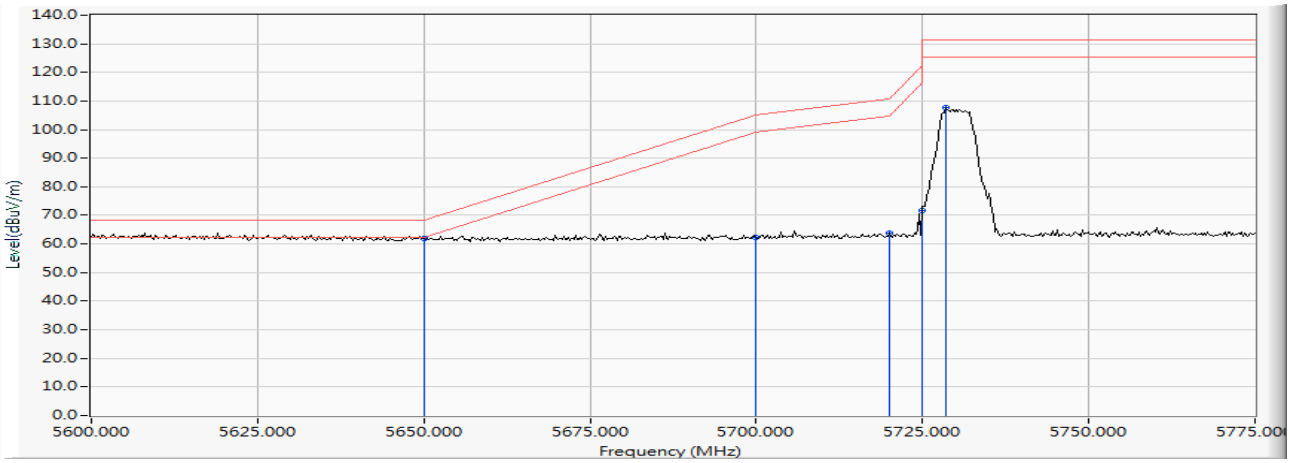
± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

6.5. Test Result of Band Edge

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.7)

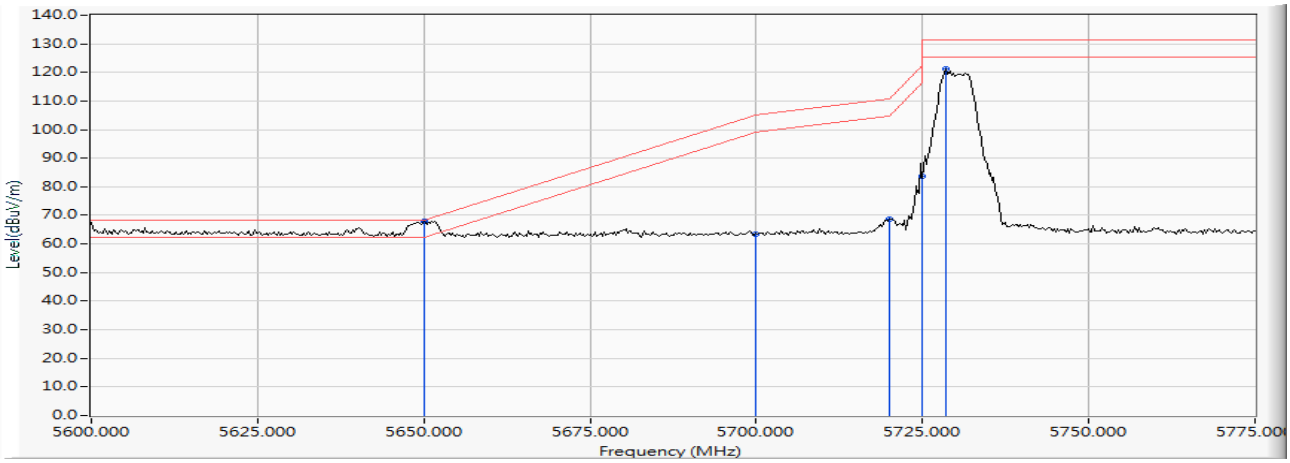
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	19.214	42.621	61.835	-6.385	68.220	PEAK
2		5700.000	19.169	43.089	62.258	-42.942	105.200	PEAK
3		5720.000	19.151	44.624	63.775	-47.025	110.800	PEAK
4		5725.000	19.147	52.722	71.869	-50.331	122.200	PEAK
5		5728.587	19.144	88.398	107.541	-23.659	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.7)

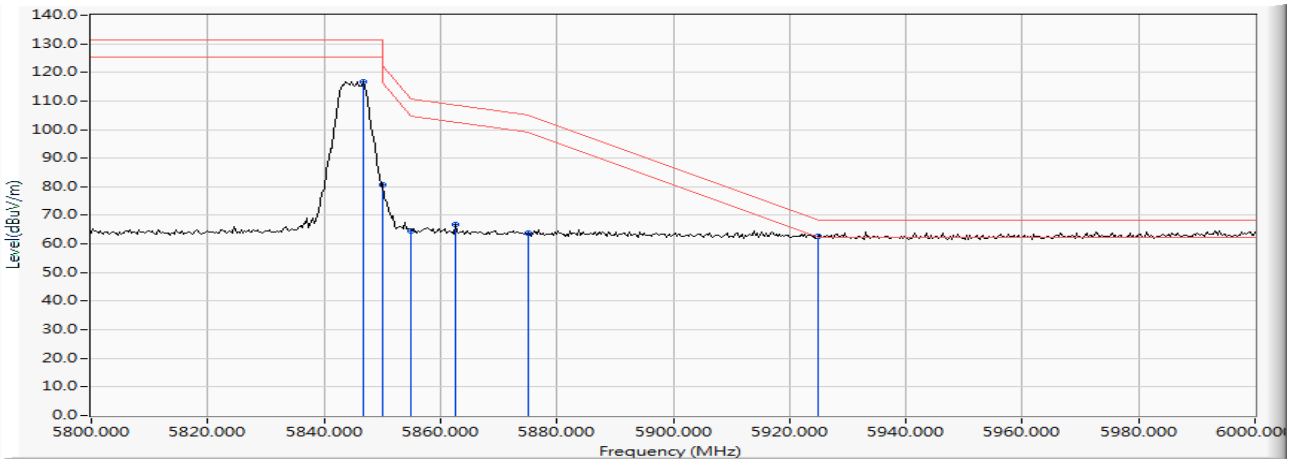
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	19.214	48.614	67.828	-0.392	68.220	PEAK
2		5700.000	19.169	44.447	63.616	-41.584	105.200	PEAK
3		5720.000	19.151	49.454	68.605	-42.195	110.800	PEAK
4		5725.000	19.147	64.439	83.586	-38.614	122.200	PEAK
5		5728.587	19.144	102.130	121.273	-9.927	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.7)

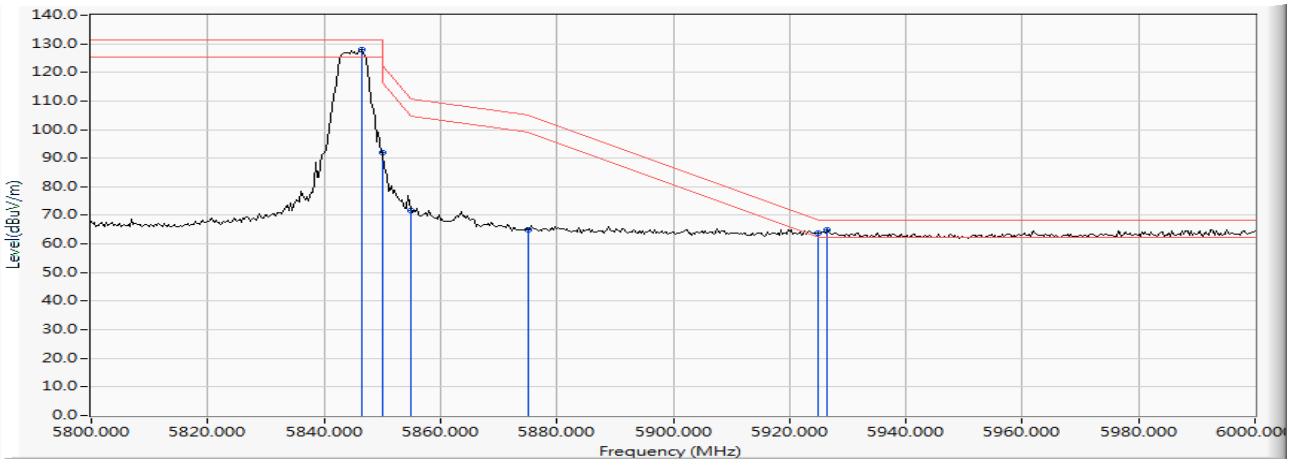
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5846.667	19.619	97.263	116.882	-14.318	131.200	PEAK
2		5850.000	19.632	61.066	80.698	-41.502	122.200	PEAK
3		5855.000	19.651	45.016	64.667	-46.133	110.800	PEAK
4		5862.609	19.678	47.253	66.932	-41.737	108.669	PEAK
5		5875.000	19.718	44.052	63.770	-41.430	105.200	PEAK
6	*	5925.000	19.875	42.795	62.670	-5.550	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.7)

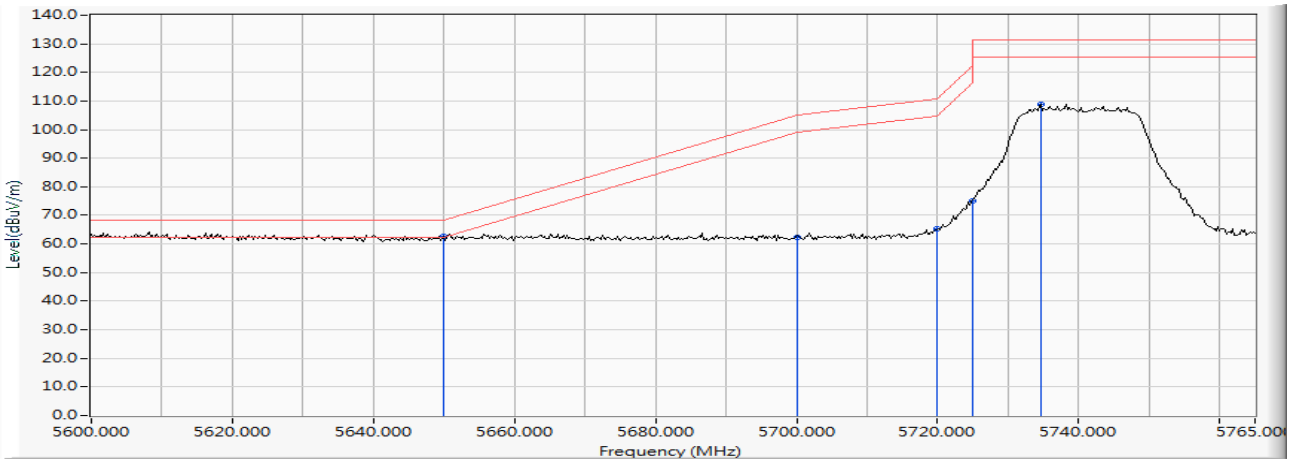
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5846.377	19.619	108.383	128.001	-3.199	131.200	PEAK
2		5850.000	19.632	72.285	91.917	-30.283	122.200	PEAK
3		5855.000	19.651	52.171	71.822	-38.978	110.800	PEAK
4		5875.000	19.718	45.236	64.954	-40.246	105.200	PEAK
5		5925.000	19.875	43.894	63.769	-4.451	68.220	PEAK
6		5926.377	19.880	45.064	64.943	-3.277	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.7)

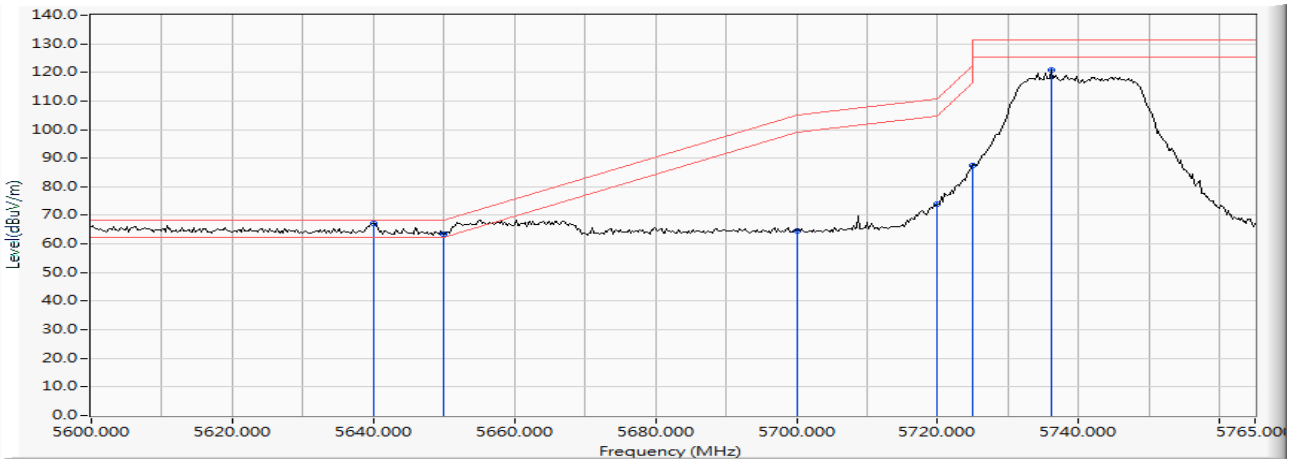
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	19.214	43.409	62.623	-5.597	68.220	PEAK
2		5700.000	19.169	43.205	62.374	-42.826	105.200	PEAK
3		5720.000	19.151	46.179	65.330	-45.470	110.800	PEAK
4		5725.000	19.147	56.068	75.215	-46.985	122.200	PEAK
5		5734.630	19.138	89.839	108.977	-22.223	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.7)

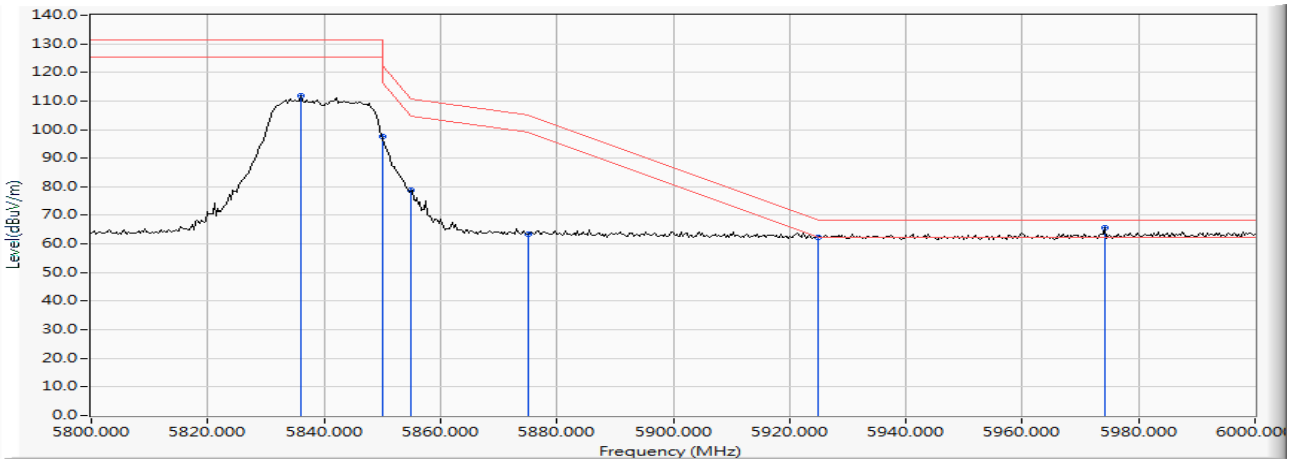
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5639.935	19.223	47.952	67.175	-1.045	68.220	PEAK
2		5650.000	19.214	44.369	63.583	-4.637	68.220	PEAK
3		5700.000	19.169	45.494	64.663	-40.537	105.200	PEAK
4		5720.000	19.151	54.630	73.781	-37.019	110.800	PEAK
5		5725.000	19.147	68.408	87.555	-34.645	122.200	PEAK
6		5736.065	19.136	101.636	120.773	-10.427	131.200	PEAK

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/10/15
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.7)

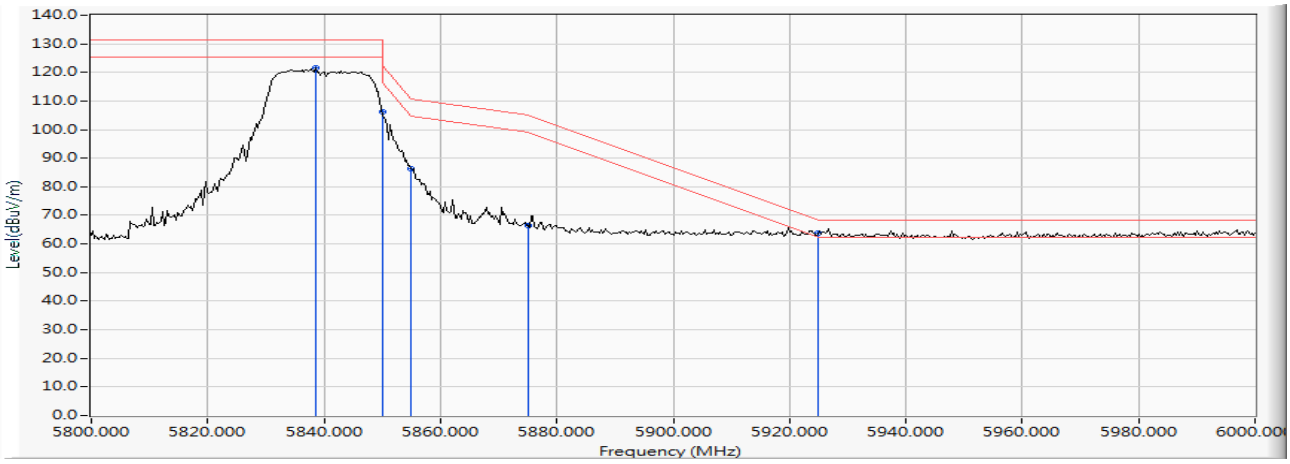
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5835.942	19.567	92.316	111.883	-19.317	131.200	PEAK
2		5850.000	19.632	77.854	97.486	-24.714	122.200	PEAK
3		5855.000	19.651	59.067	78.718	-32.082	110.800	PEAK
4		5875.000	19.718	43.849	63.567	-41.633	105.200	PEAK
5		5925.000	19.875	42.549	62.424	-5.796	68.220	PEAK
6	*	5974.203	20.030	45.474	65.504	-2.716	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.7)

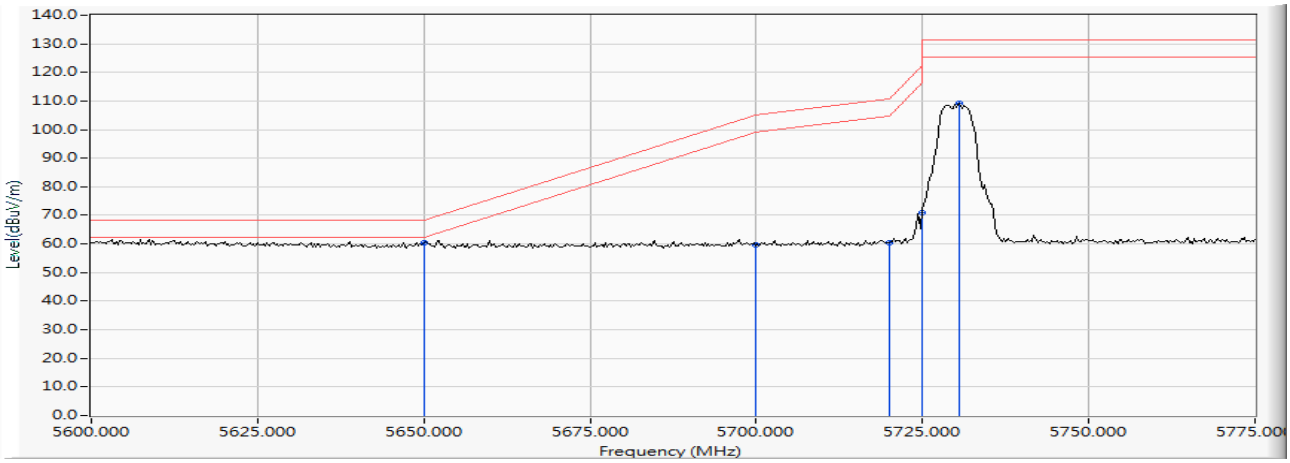
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5838.551	19.580	101.846	121.426	-9.774	131.200	PEAK
2		5850.000	19.632	86.671	106.303	-15.897	122.200	PEAK
3		5855.000	19.651	66.610	86.261	-24.539	110.800	PEAK
4		5875.000	19.718	46.688	66.406	-38.794	105.200	PEAK
5	*	5925.000	19.875	43.839	63.714	-4.506	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.8)

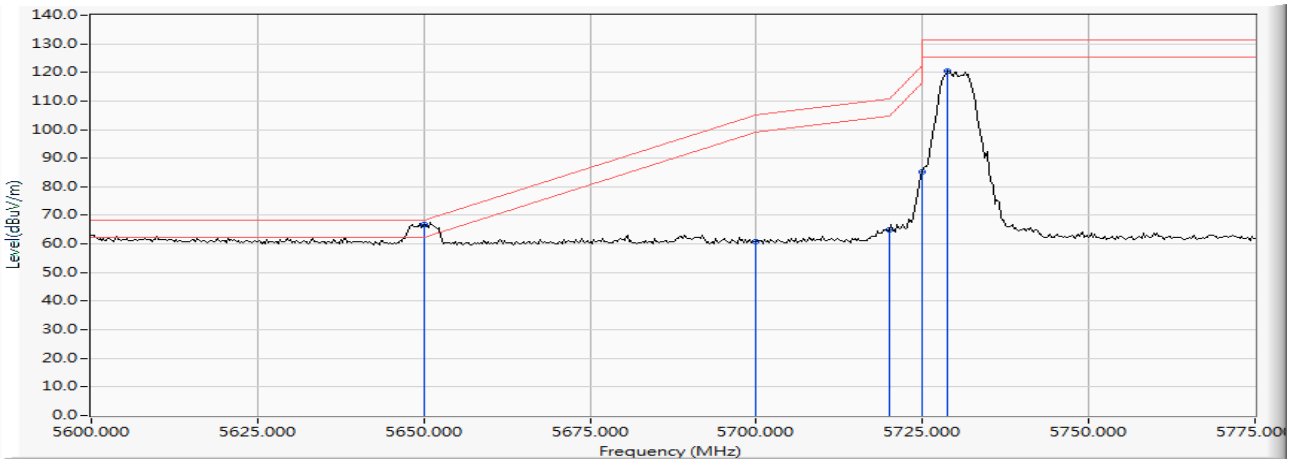
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	16.772	43.565	60.337	-7.883	68.220	PEAK
2		5700.000	16.636	42.977	59.613	-45.587	105.200	PEAK
3		5720.000	16.623	43.897	60.520	-50.280	110.800	PEAK
4		5725.000	16.624	54.306	70.930	-51.270	122.200	PEAK
5		5730.616	16.624	92.754	109.378	-21.822	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.8)

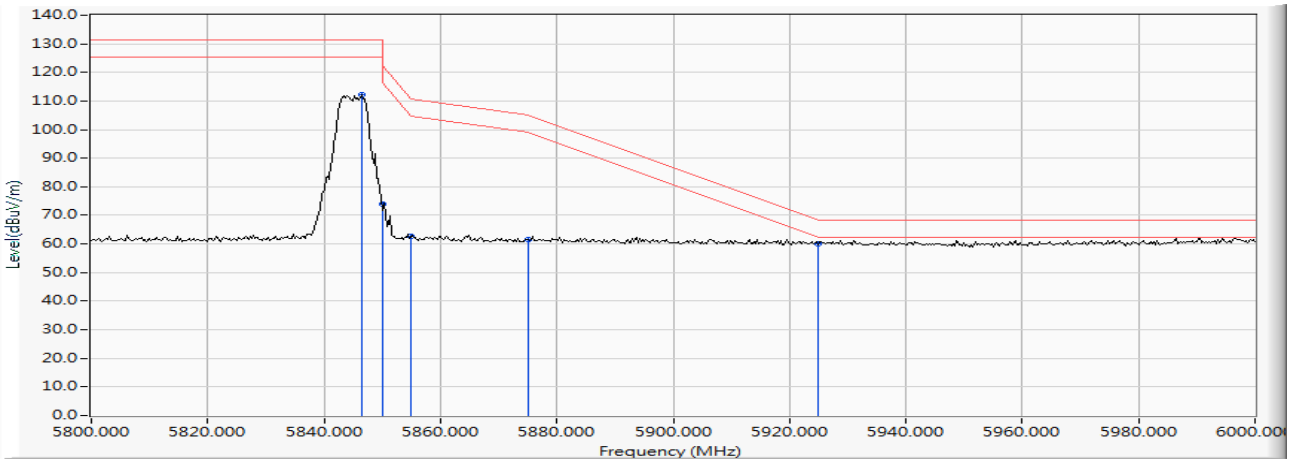
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	16.772	50.059	66.831	-1.389	68.220	PEAK
2		5700.000	16.636	44.200	60.836	-44.364	105.200	PEAK
3		5720.000	16.623	48.237	64.860	-45.940	110.800	PEAK
4		5725.000	16.624	68.724	85.348	-36.852	122.200	PEAK
5		5728.841	16.625	103.797	120.421	-10.779	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.8)

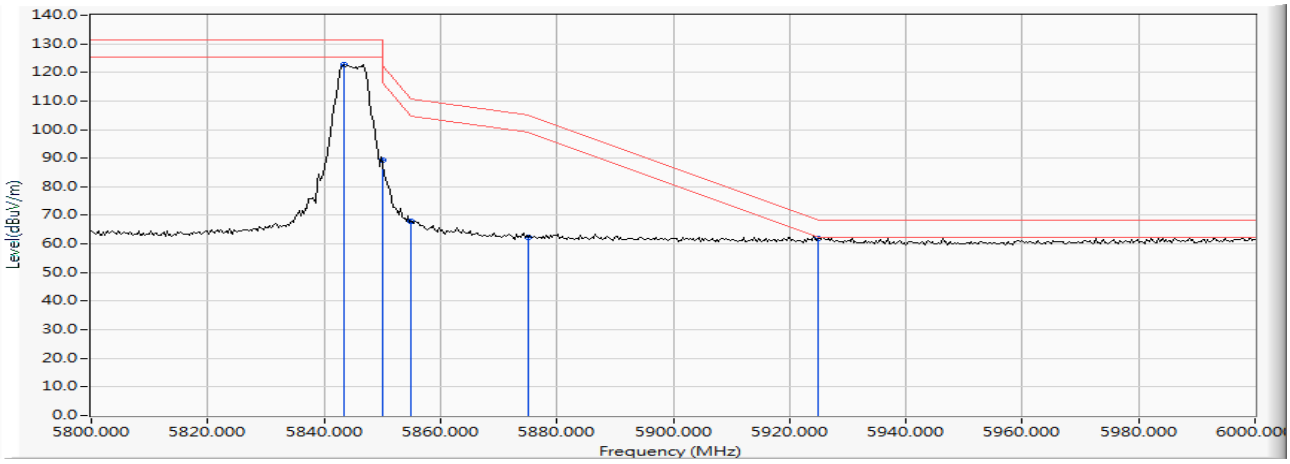
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5846.377	17.064	95.031	112.094	-19.106	131.200	PEAK
2		5850.000	17.081	56.906	73.987	-48.213	122.200	PEAK
3		5855.000	17.106	45.551	62.657	-48.143	110.800	PEAK
4		5875.000	17.208	44.393	61.601	-43.599	105.200	PEAK
5	*	5925.000	17.361	42.605	59.966	-8.254	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.8)

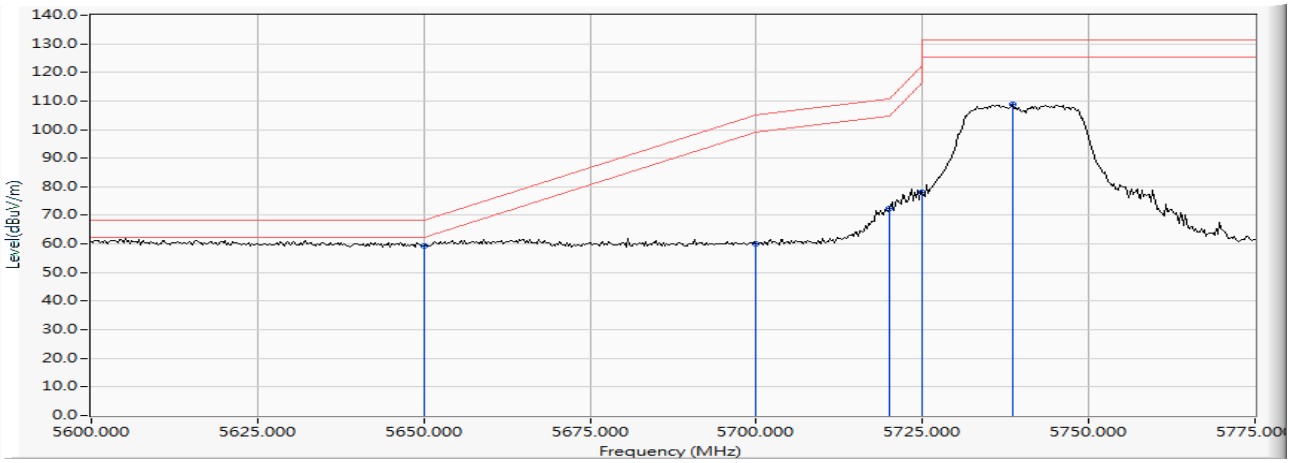
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5843.478	17.048	105.832	122.880	-8.320	131.200	PEAK
2		5850.000	17.081	72.264	89.345	-32.855	122.200	PEAK
3		5855.000	17.106	50.673	67.779	-43.021	110.800	PEAK
4		5875.000	17.208	45.280	62.488	-42.712	105.200	PEAK
5	*	5925.000	17.361	44.481	61.842	-6.378	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.8)

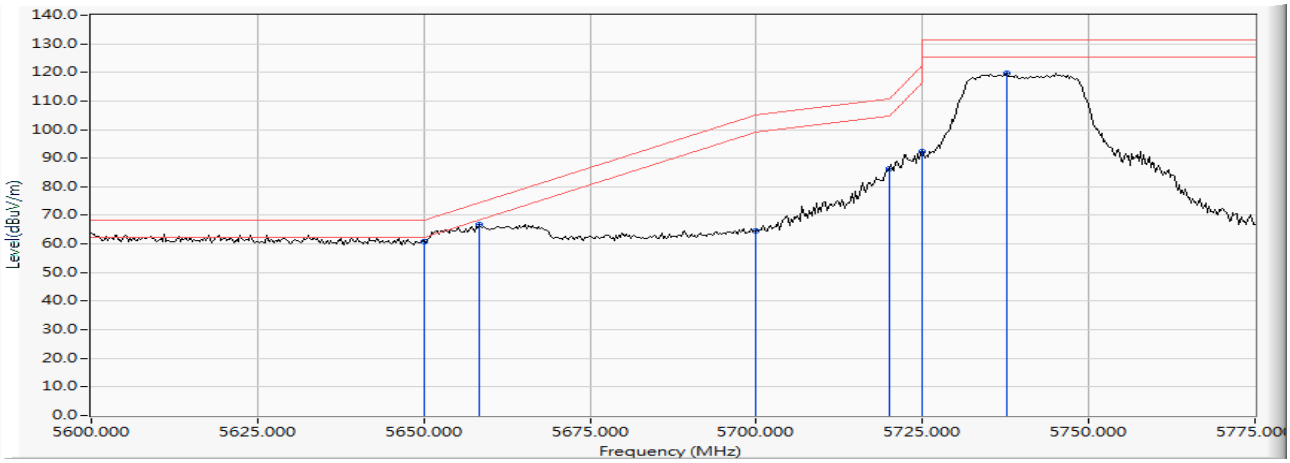
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	16.772	42.566	59.338	-8.882	68.220	PEAK
2		5700.000	16.636	43.343	59.979	-45.221	105.200	PEAK
3		5720.000	16.623	55.657	72.280	-38.520	110.800	PEAK
4		5725.000	16.624	61.452	78.076	-44.124	122.200	PEAK
5		5738.478	16.624	92.081	108.706	-22.494	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.8)

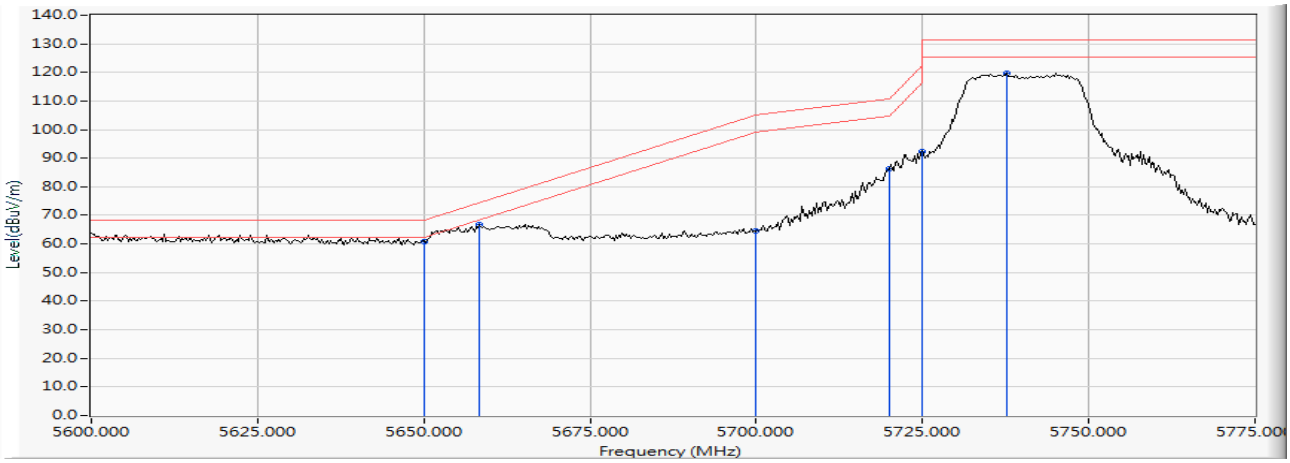
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	16.772	44.211	60.983	-7.237	68.220	PEAK
2		5658.333	16.747	49.940	66.687	-7.696	74.383	PEAK
3		5700.000	16.636	47.758	64.394	-40.806	105.200	PEAK
4		5720.000	16.623	69.557	86.180	-24.620	110.800	PEAK
5		5725.000	16.624	75.876	92.500	-29.700	122.200	PEAK
6		5737.717	16.624	103.122	119.747	-11.453	131.200	PEAK

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/10/15
Test Mode	:	Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.8)

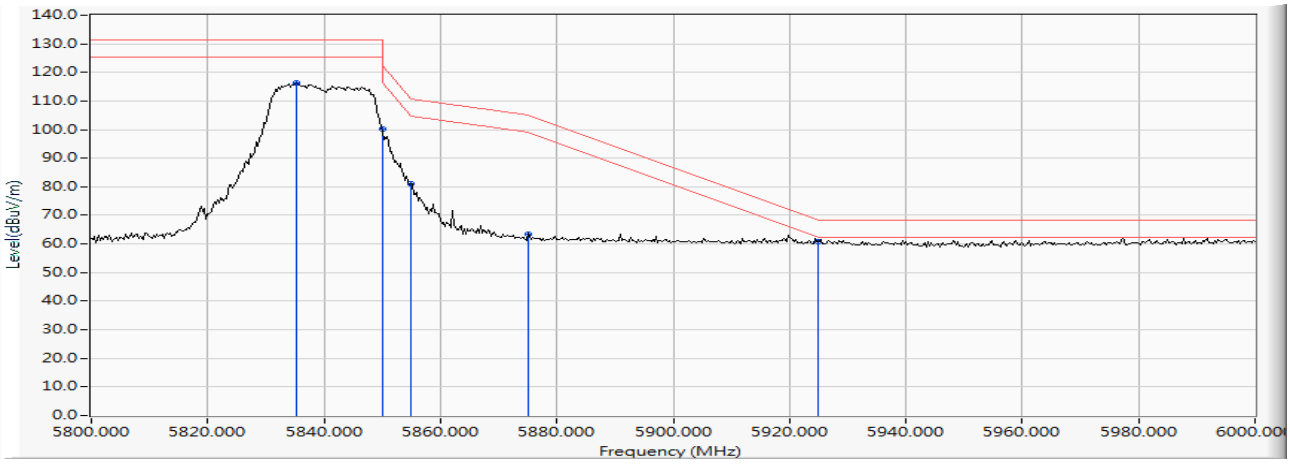
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	16.772	44.211	60.983	-7.237	68.220	PEAK
2		5658.333	16.747	49.940	66.687	-7.696	74.383	PEAK
3		5700.000	16.636	47.758	64.394	-40.806	105.200	PEAK
4		5720.000	16.623	69.557	86.180	-24.620	110.800	PEAK
5		5725.000	16.624	75.876	92.500	-29.700	122.200	PEAK
6		5737.717	16.624	103.122	119.747	-11.453	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.8)

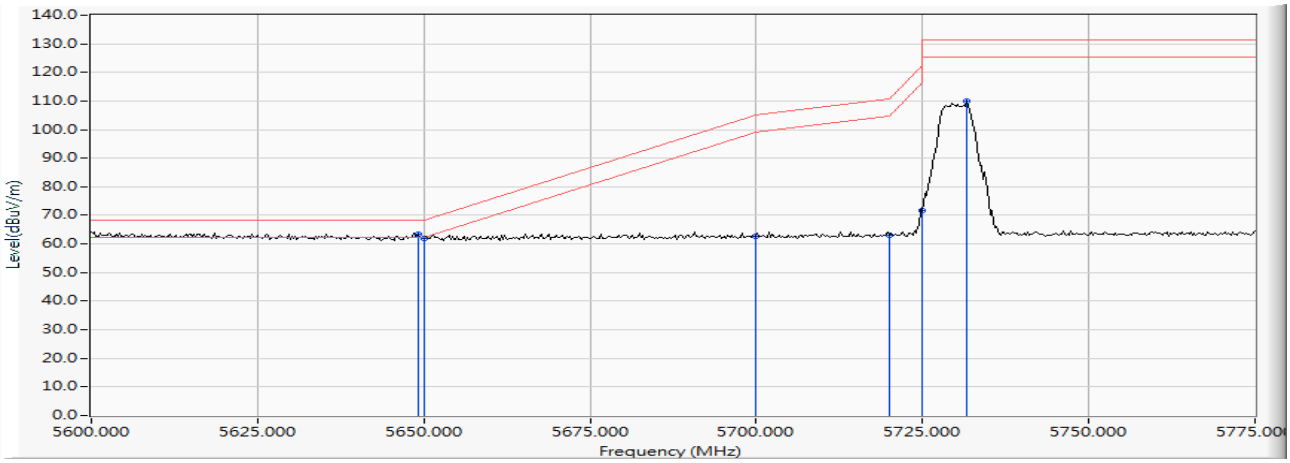
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5835.362	17.007	99.504	116.511	-14.689	131.200	PEAK
2		5850.000	17.081	82.981	100.062	-22.138	122.200	PEAK
3		5855.000	17.106	64.028	81.134	-29.666	110.800	PEAK
4		5875.000	17.208	46.068	63.276	-41.924	105.200	PEAK
5	*	5925.000	17.361	43.400	60.761	-7.459	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.9)

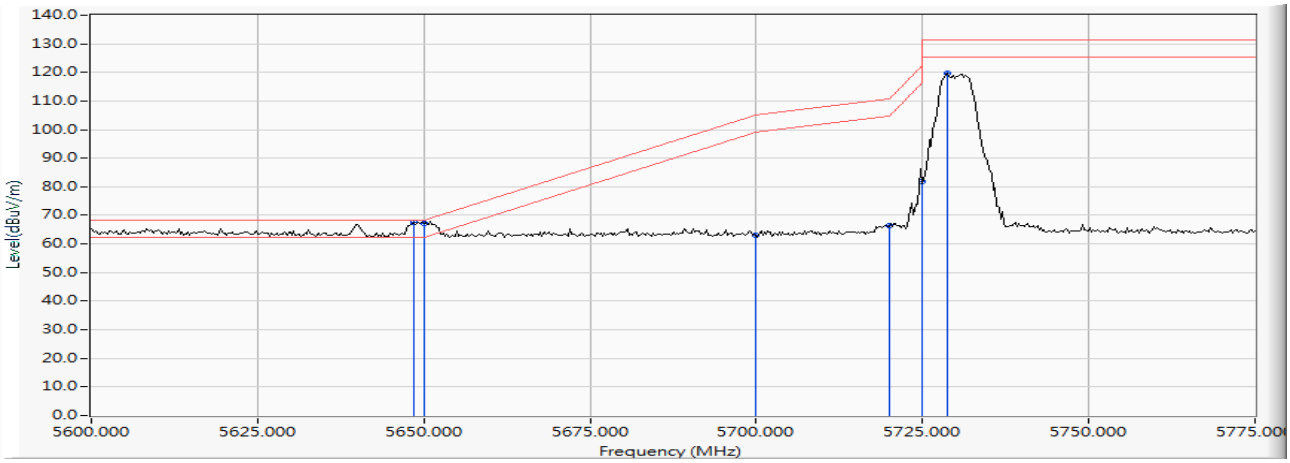
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5649.203	19.214	44.219	63.434	-4.786	68.220	PEAK
2		5650.000	19.214	42.831	62.045	-6.175	68.220	PEAK
3		5700.000	19.169	43.571	62.740	-42.460	105.200	PEAK
4		5720.000	19.151	43.935	63.086	-47.714	110.800	PEAK
5		5725.000	19.147	52.392	71.539	-50.661	122.200	PEAK
6		5731.630	19.140	90.776	109.916	-21.284	131.200	PEAK

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/10/15
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5730MHz)-Channel 182 (Antenna No.9)

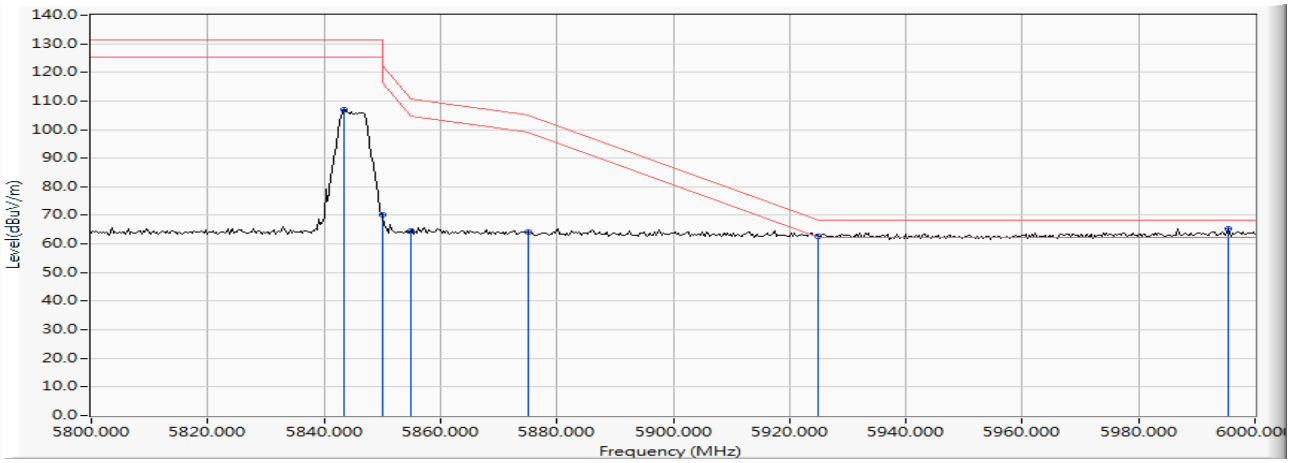
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5648.442	19.215	48.301	67.516	-0.704	68.220	PEAK
2		5650.000	19.214	48.045	67.259	-0.961	68.220	PEAK
3		5700.000	19.169	43.765	62.934	-42.266	105.200	PEAK
4		5720.000	19.151	47.206	66.357	-44.443	110.800	PEAK
5		5725.000	19.147	62.558	81.705	-40.495	122.200	PEAK
6		5728.841	19.144	100.479	119.622	-11.578	131.200	PEAK

Product	:	Moxa 2.4/4.9/5 GHz
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/10/15
Test Mode	:	Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.9)

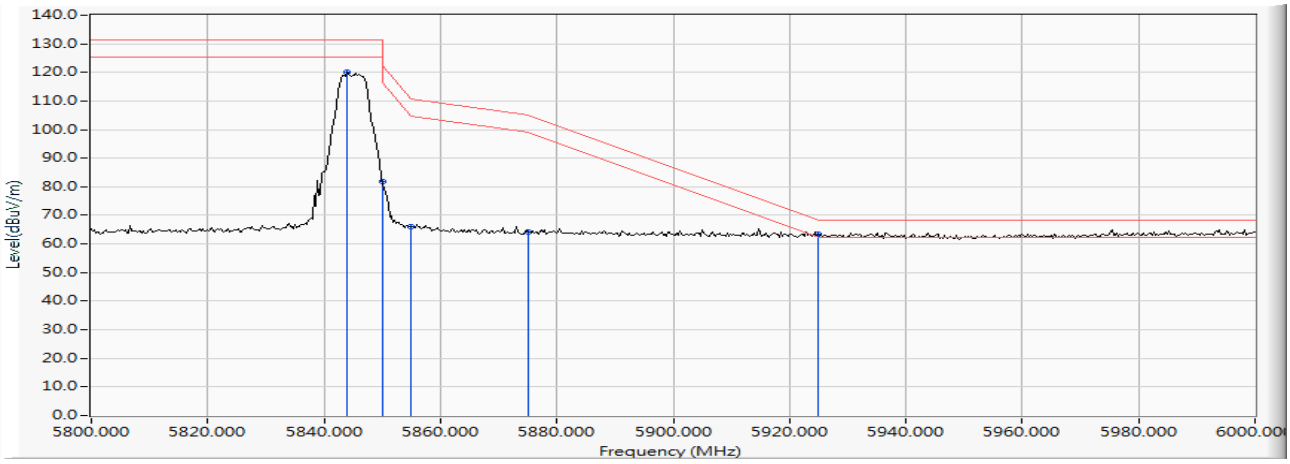
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5843.478	19.605	87.437	107.042	-24.158	131.200	PEAK
2		5850.000	19.632	50.706	70.338	-51.862	122.200	PEAK
3		5855.000	19.651	44.997	64.648	-46.152	110.800	PEAK
4		5875.000	19.718	44.363	64.081	-41.119	105.200	PEAK
5		5925.000	19.875	42.644	62.519	-5.701	68.220	PEAK
6	*	5995.362	20.096	45.136	65.232	-2.988	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 1: Transmit - (OFDM-5BW) (5845MHz) -Channel 205 (Antenna No.9)

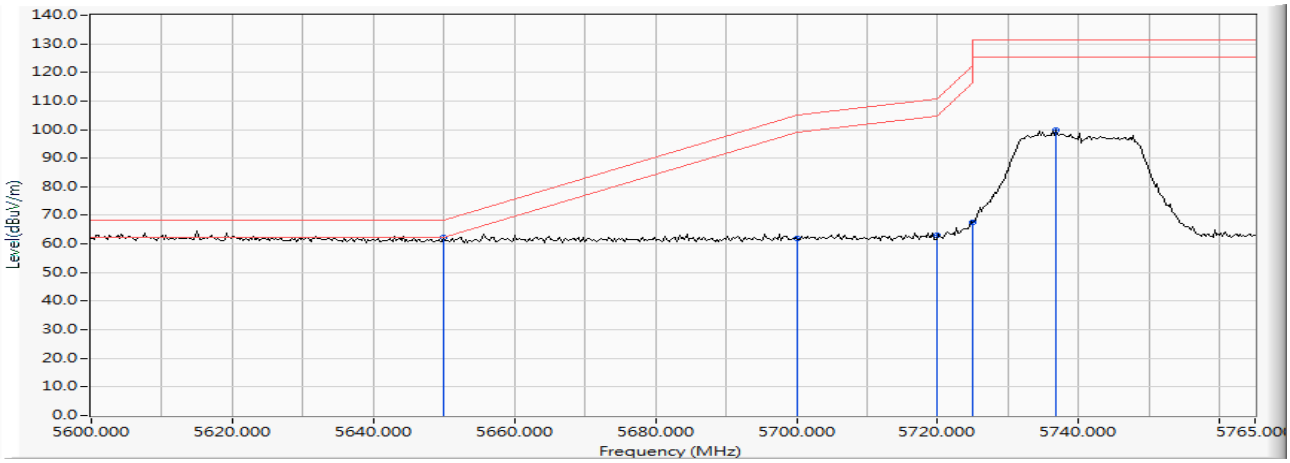
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5844.058	19.608	100.502	120.110	-11.090	131.200	PEAK
2		5850.000	19.632	62.351	81.983	-40.217	122.200	PEAK
3		5855.000	19.651	46.403	66.054	-44.746	110.800	PEAK
4		5875.000	19.718	44.648	64.366	-40.834	105.200	PEAK
5	*	5925.000	19.875	43.605	63.480	-4.740	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.9)

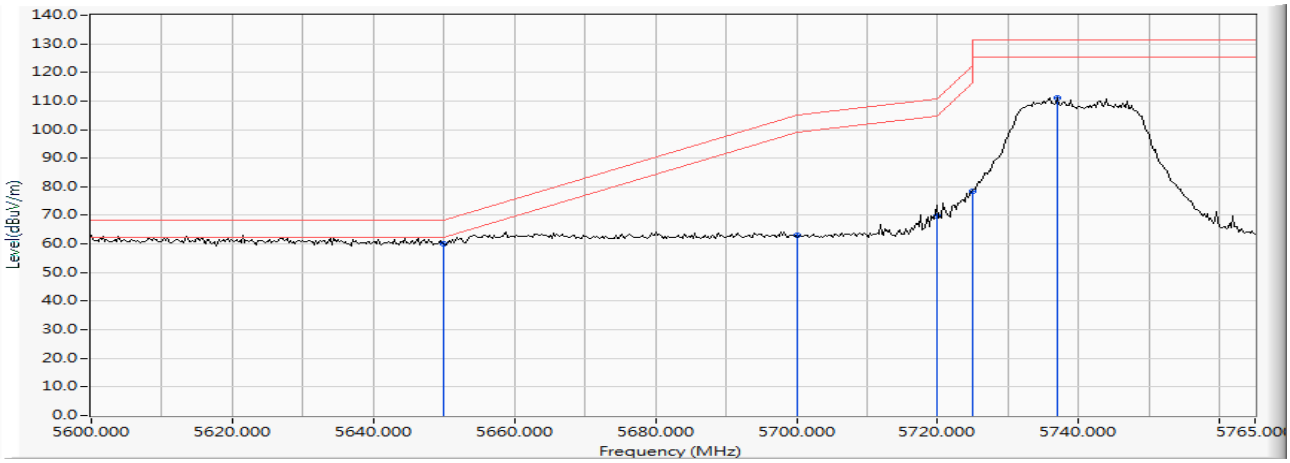
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	19.214	43.111	62.325	-5.895	68.220	PEAK
2		5700.000	19.169	42.927	62.096	-43.104	105.200	PEAK
3		5720.000	19.151	43.902	63.053	-47.747	110.800	PEAK
4		5725.000	19.147	48.561	67.708	-54.492	122.200	PEAK
5		5736.783	19.137	80.607	99.743	-31.457	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5740MHz)-Channel 184 (Antenna No.9)

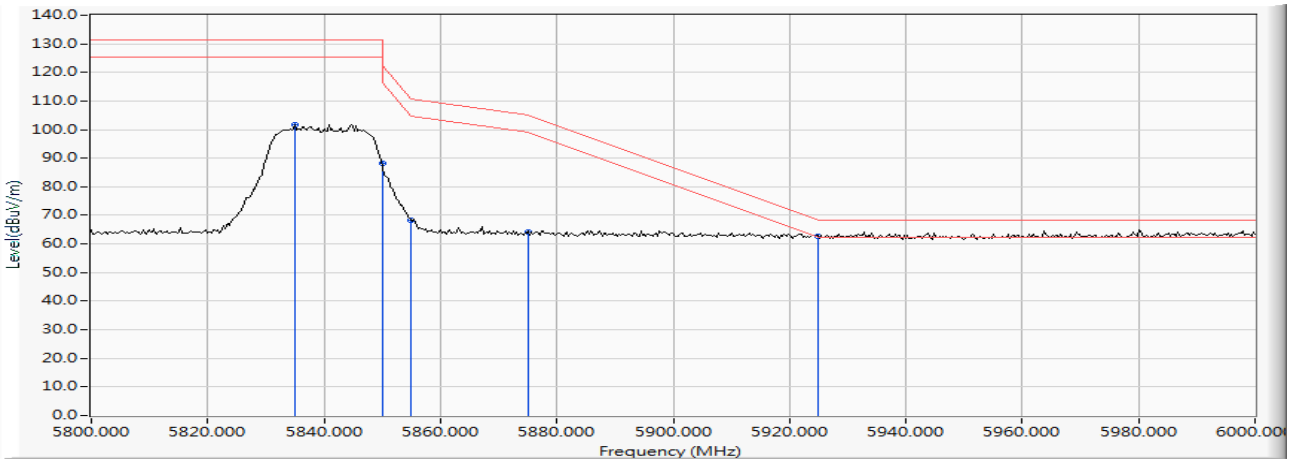
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	5650.000	19.214	40.826	60.040	-8.180	68.220	PEAK
2		5700.000	19.169	43.794	62.963	-42.237	105.200	PEAK
3		5720.000	19.151	50.779	69.930	-40.870	110.800	PEAK
4		5725.000	19.147	59.352	78.499	-43.701	122.200	PEAK
5		5737.022	19.136	92.045	111.181	-20.019	131.200	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.9)

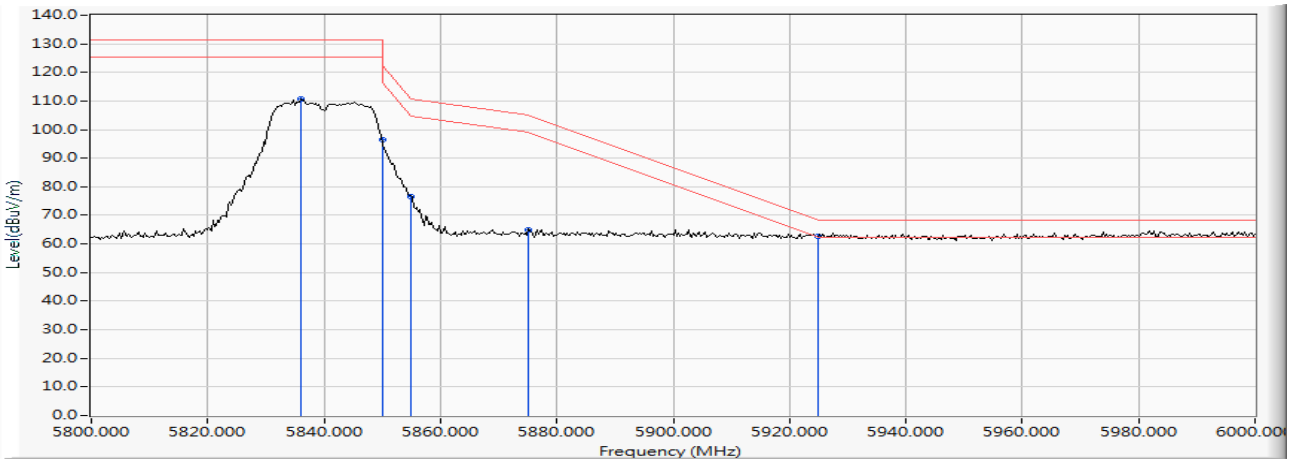
RF Radiated Measurement: Horizontal



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5835.072	19.562	82.166	101.728	-29.472	131.200	PEAK
2		5850.000	19.632	68.623	88.255	-33.945	122.200	PEAK
3		5855.000	19.651	48.529	68.180	-42.620	110.800	PEAK
4		5875.000	19.718	44.594	64.312	-40.888	105.200	PEAK
5	*	5925.000	19.875	42.903	62.778	-5.442	68.220	PEAK

Product : Moxa 2.4/4.9/5 GHz
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2019/10/15
Test Mode : Mode 2: Transmit - (OFDM-20BW) (5840MHz) -Channel 204 (Antenna No.9)

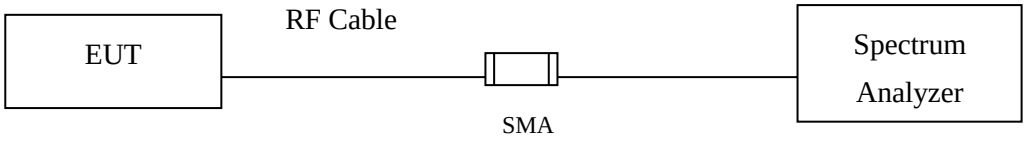
RF Radiated Measurement: Vertical



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		5835.942	19.567	91.037	110.604	-20.596	131.200	PEAK
2		5850.000	19.632	76.945	96.577	-25.623	122.200	PEAK
3		5855.000	19.651	57.058	76.709	-34.091	110.800	PEAK
4		5875.000	19.718	45.106	64.824	-40.376	105.200	PEAK
5	*	5925.000	19.875	42.703	62.578	-5.642	68.220	PEAK

7. Occupied Bandwidth

7.1. Test Setup



7.2. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz

7.3. .Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.4. Uncertainty

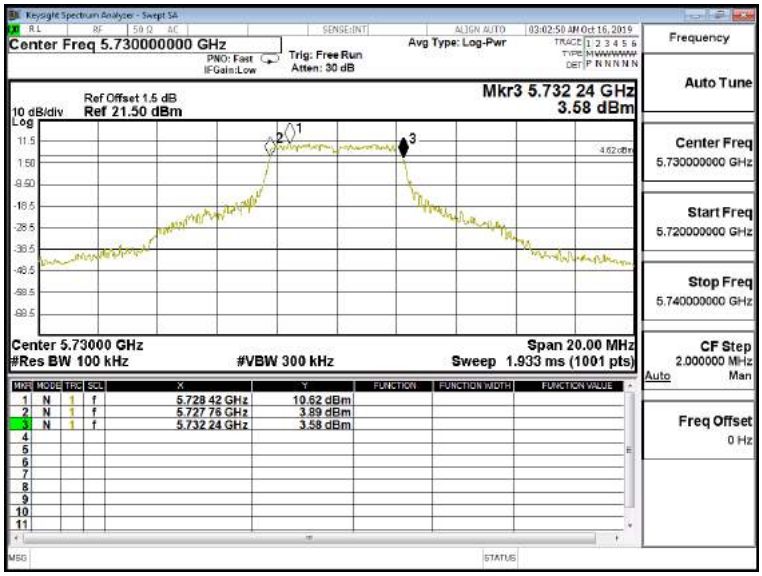
± 681.6Hz

7.5. Test Result of Occupied Bandwidth

Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.3)

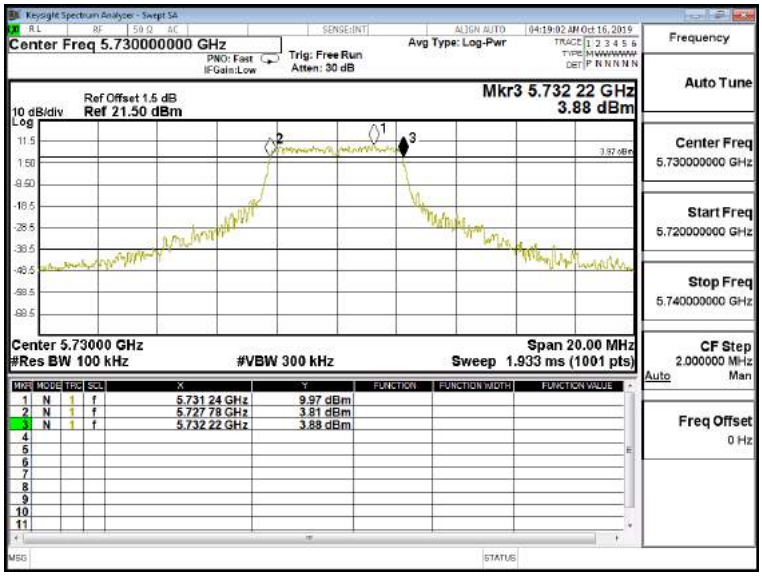
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4480	>500	Pass

Figure Channel 182: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4440	>500	Pass

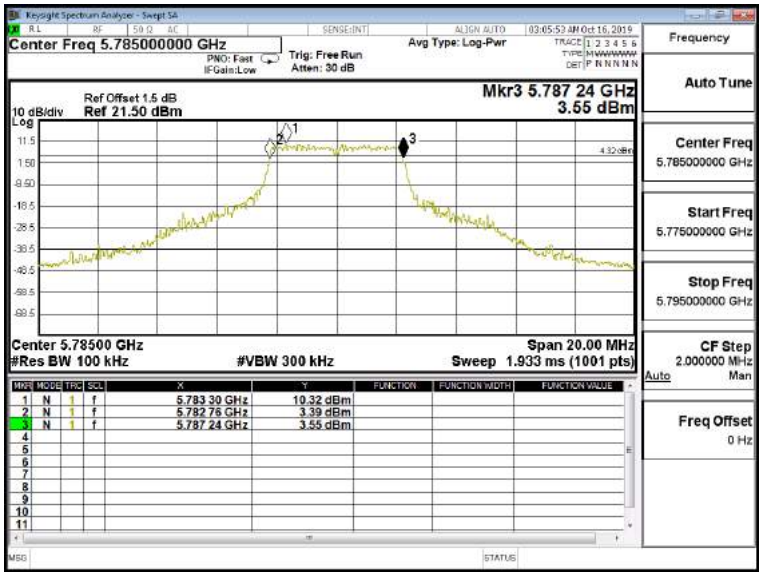
Figure Channel 182: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.3)

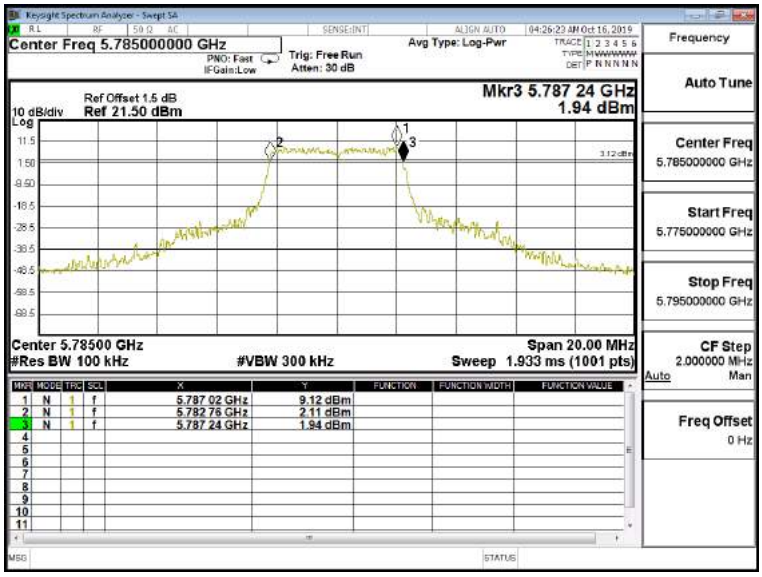
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4480	>500	Pass

Figure Channel 193: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4480	>500	Pass

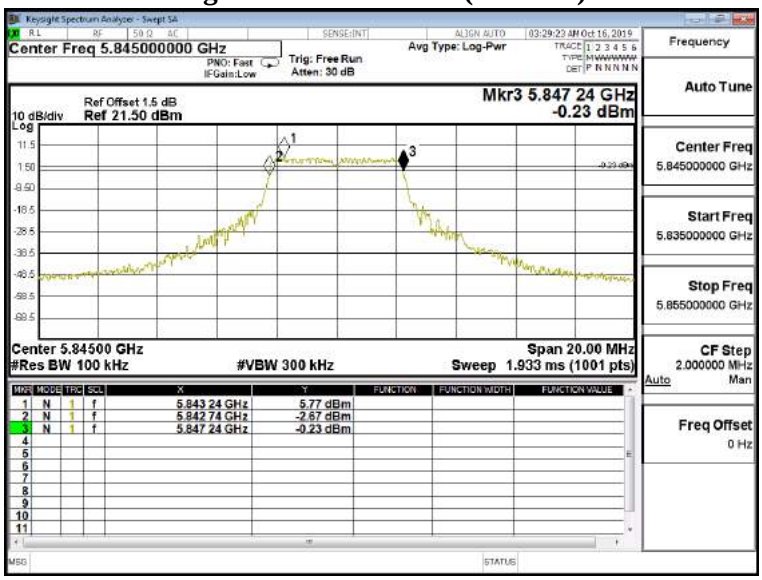
Figure Channel 193: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.3)

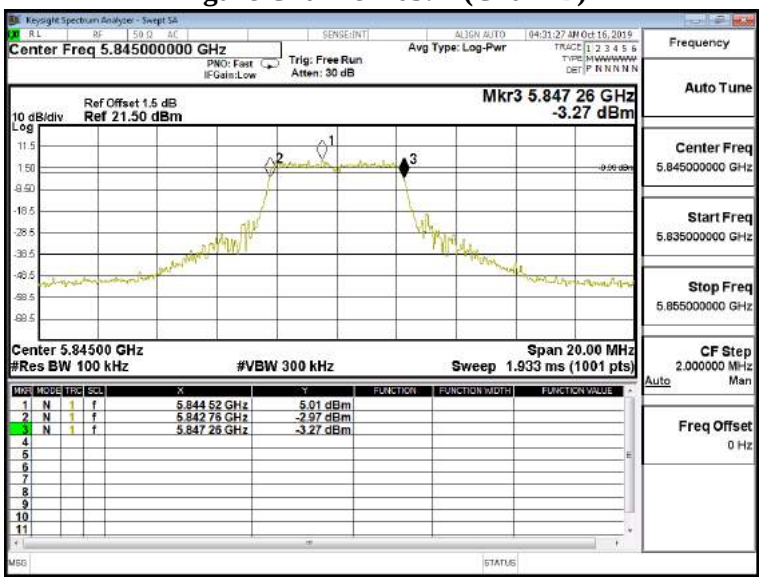
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4500	>500	Pass

Figure Channel 205: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4500	>500	Pass

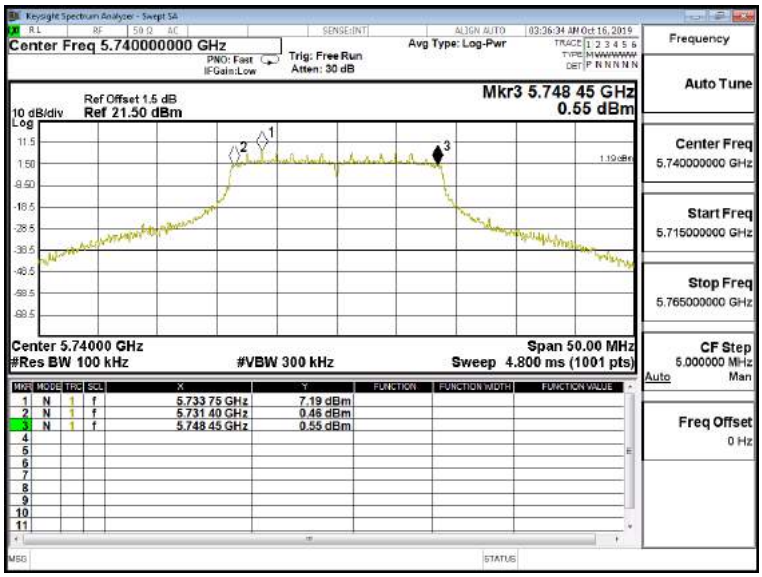
Figure Channel 205: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.3)

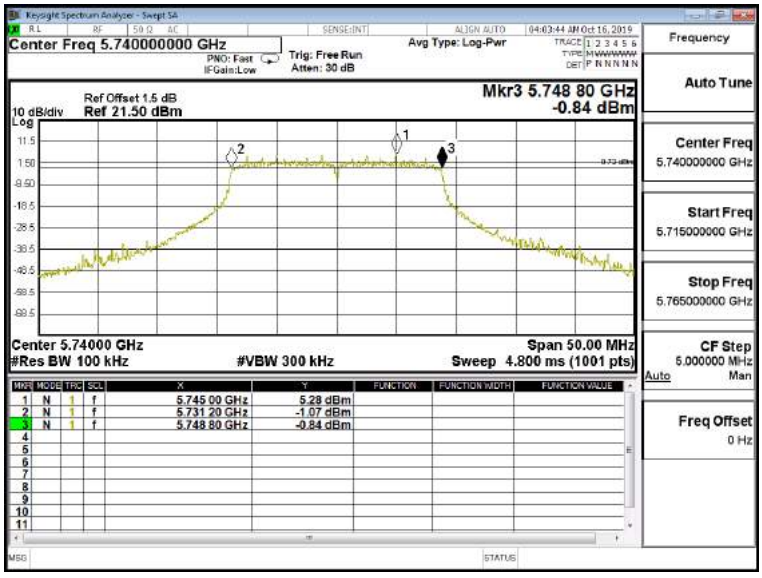
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17050	>500	Pass

Figure Channel 184: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17600	>500	Pass

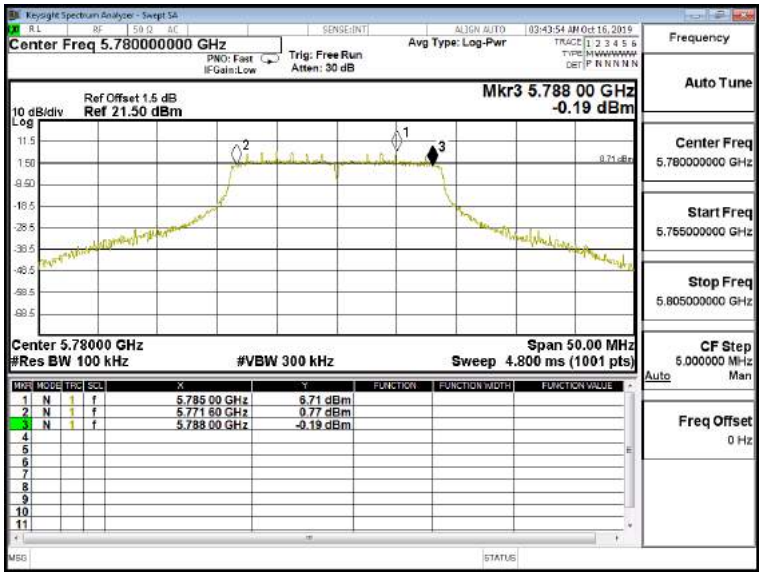
Figure Channel 184: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.3)

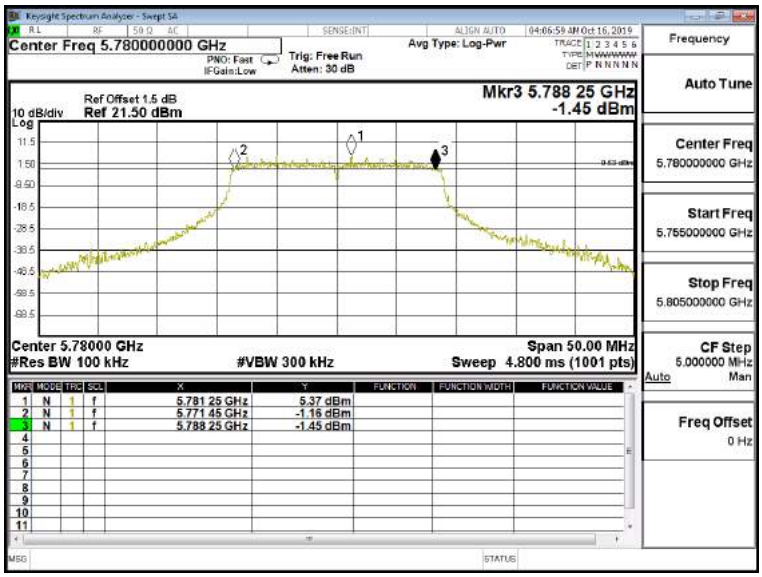
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	16400	>500	Pass

Figure Channel 192: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	16800	>500	Pass

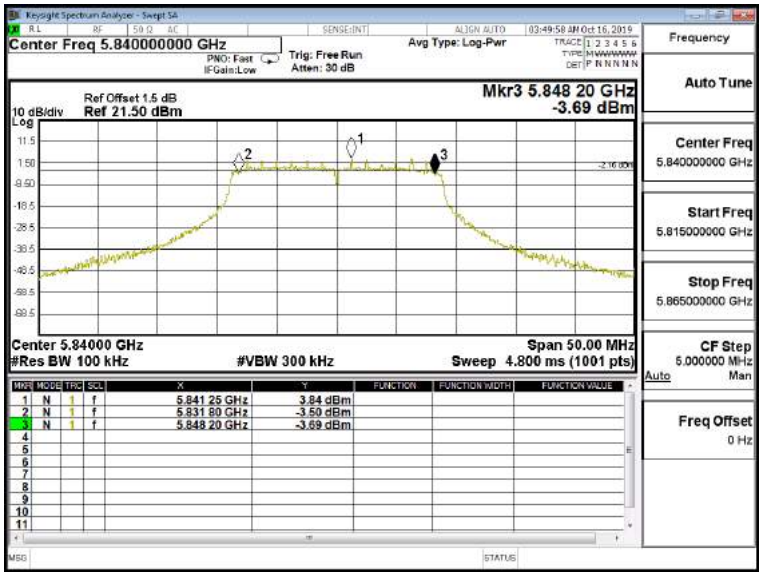
Figure Channel 192: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.3)

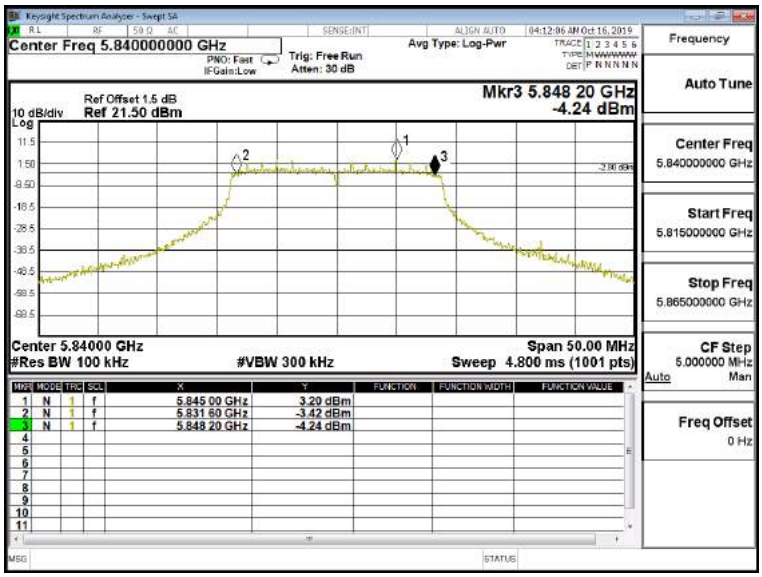
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	16400	>500	Pass

Figure Channel 204: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	16600	>500	Pass

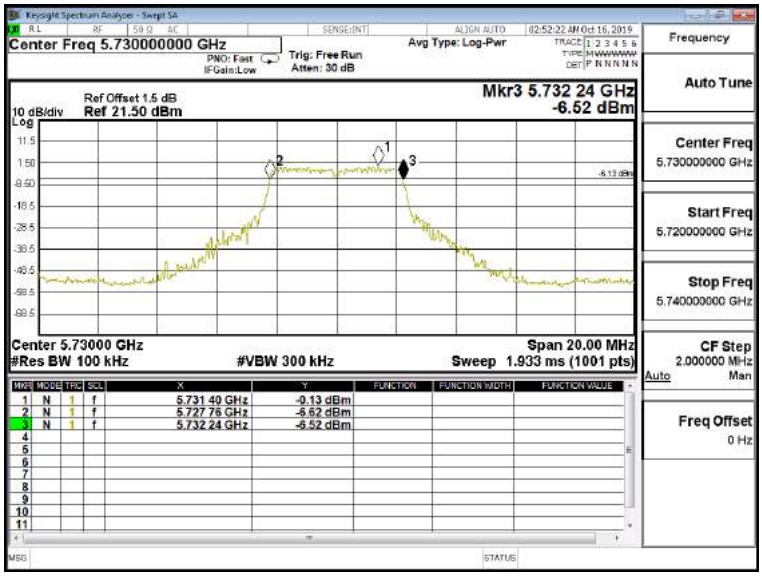
Figure Channel 204: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.7)

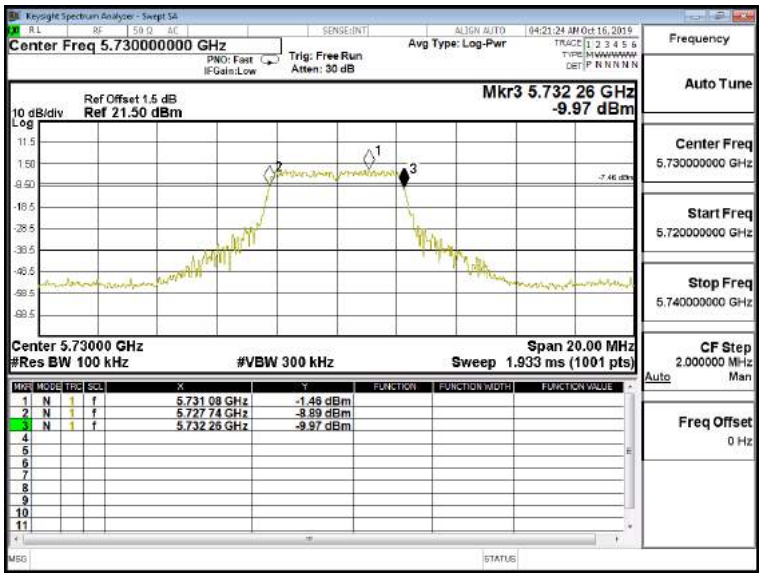
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4480	>500	Pass

Figure Channel 182: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4520	>500	Pass

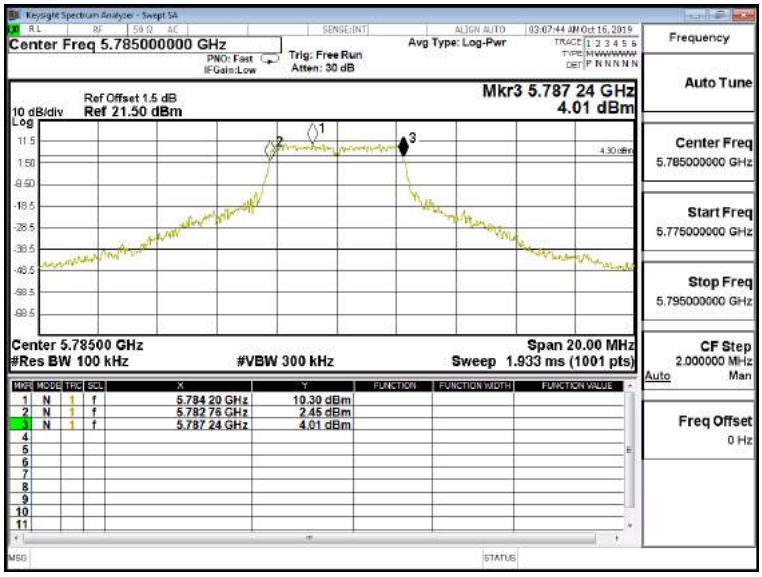
Figure Channel 182: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.7)

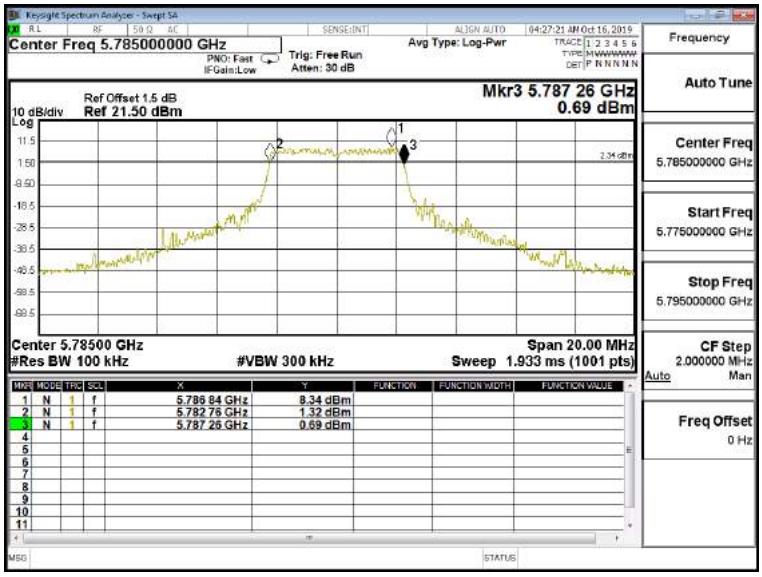
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4480	>500	Pass

Figure Channel 193: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4500	>500	Pass

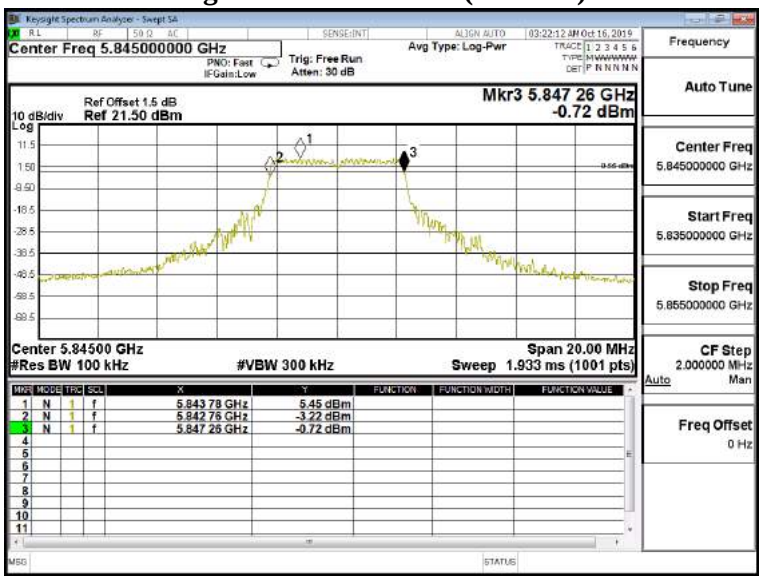
Figure Channel 193: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.7)

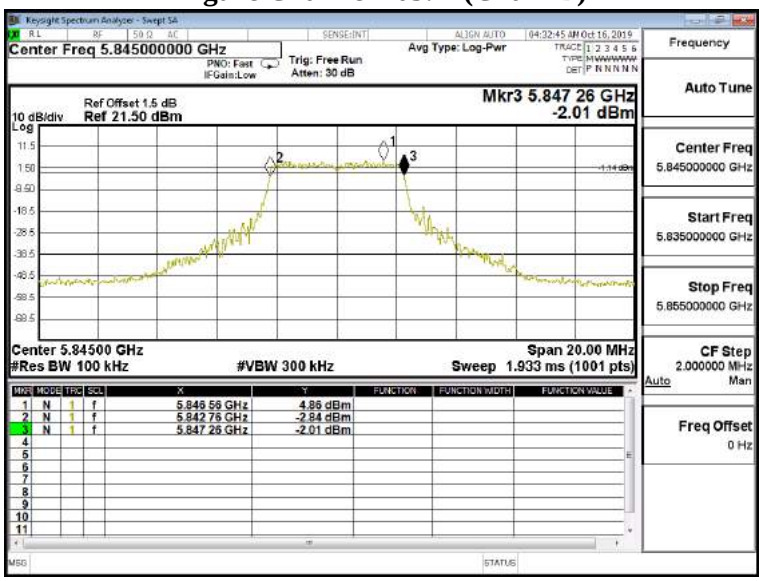
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4500	>500	Pass

Figure Channel 205: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4500	>500	Pass

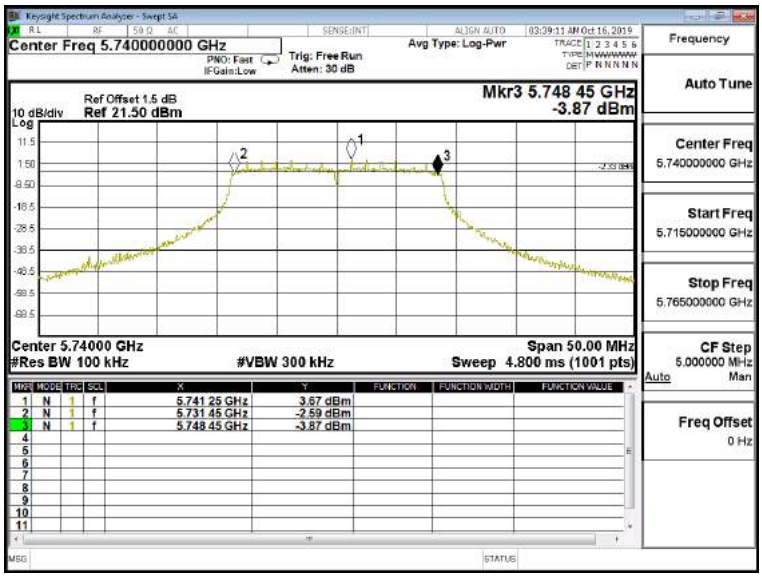
Figure Channel 205: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.7)

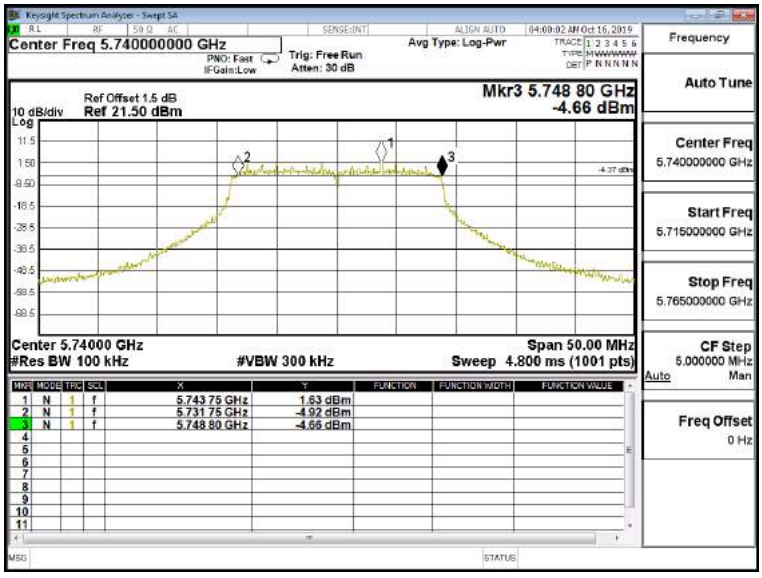
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17000	>500	Pass

Figure Channel 184: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17050	>500	Pass

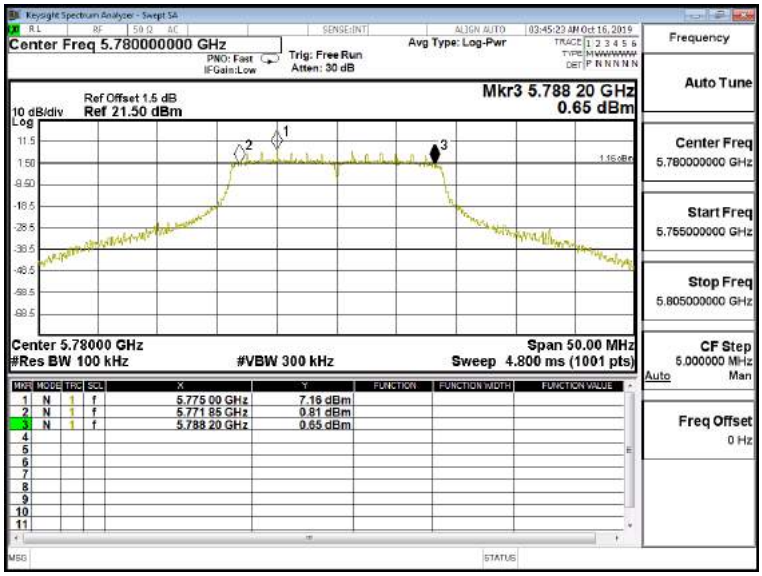
Figure Channel 184: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.7)

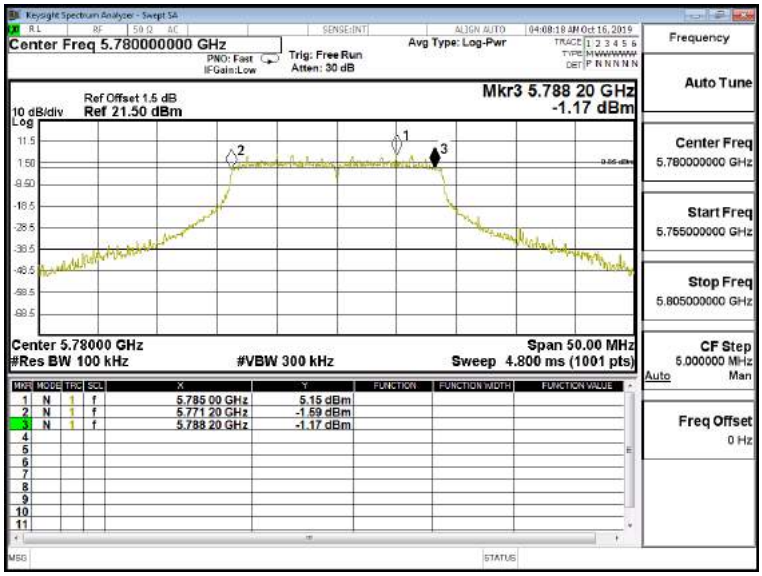
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	16350	>500	Pass

Figure Channel 192: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	17000	>500	Pass

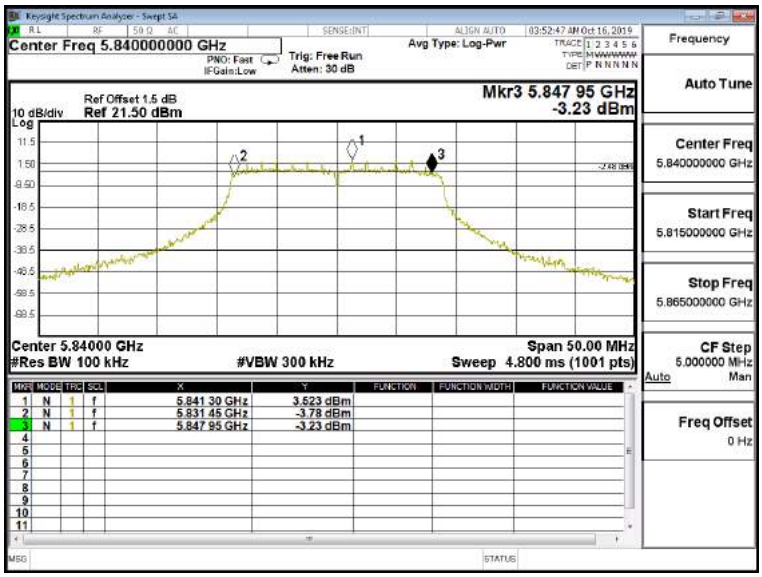
Figure Channel 192: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.7)

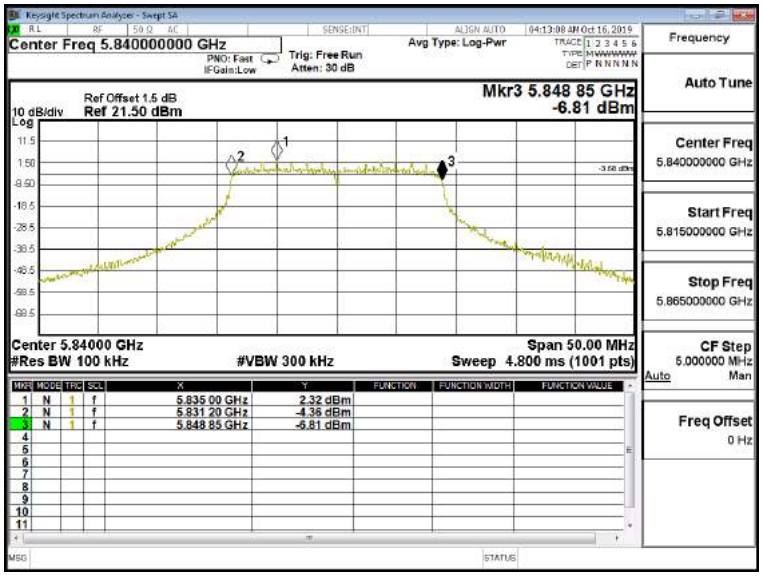
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	16500	>500	Pass

Figure Channel 204: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	17650	>500	Pass

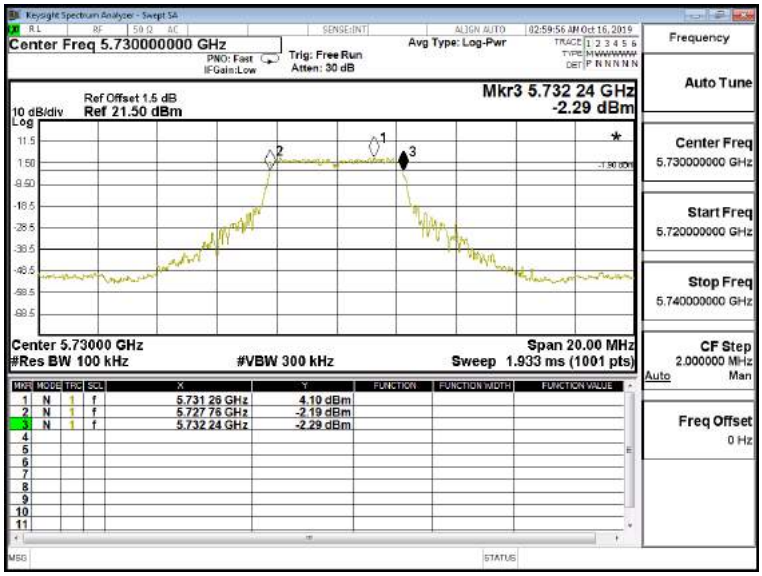
Figure Channel 204: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.8)

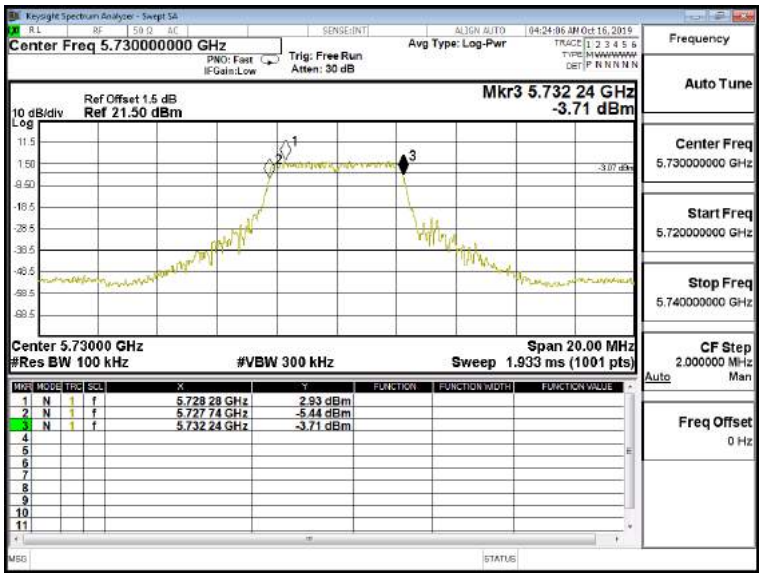
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4480	>500	Pass

Figure Channel 182: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
182	5730	4500	>500	Pass

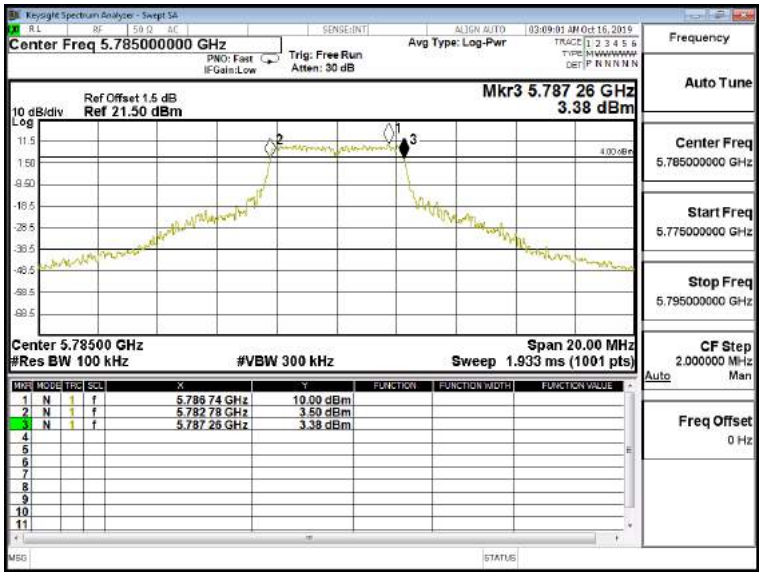
Figure Channel 182: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.8)

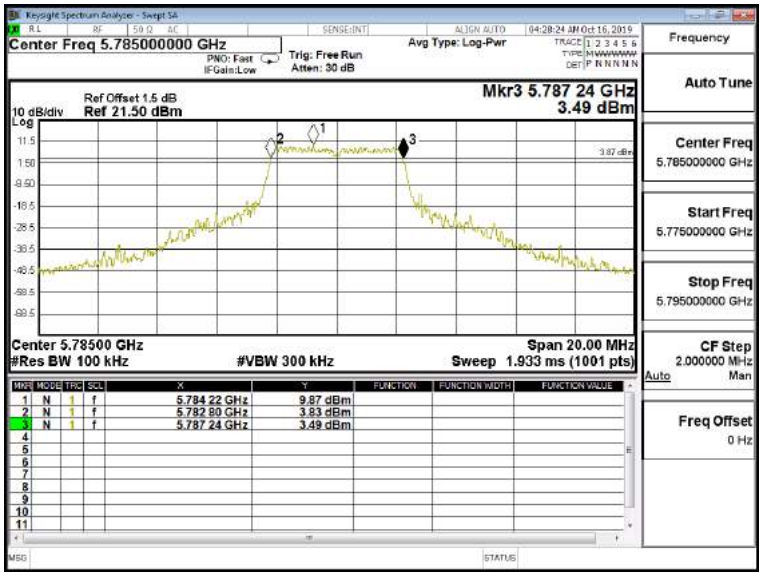
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4480	>500	Pass

Figure Channel 193: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
193	5785	4440	>500	Pass

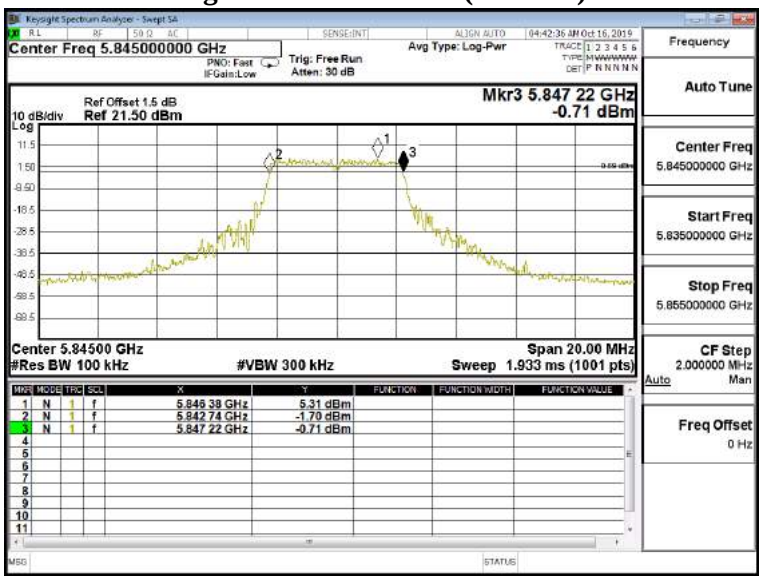
Figure Channel 193: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 1: Transmit - (OFDM-5BW) (Antenna No.8)

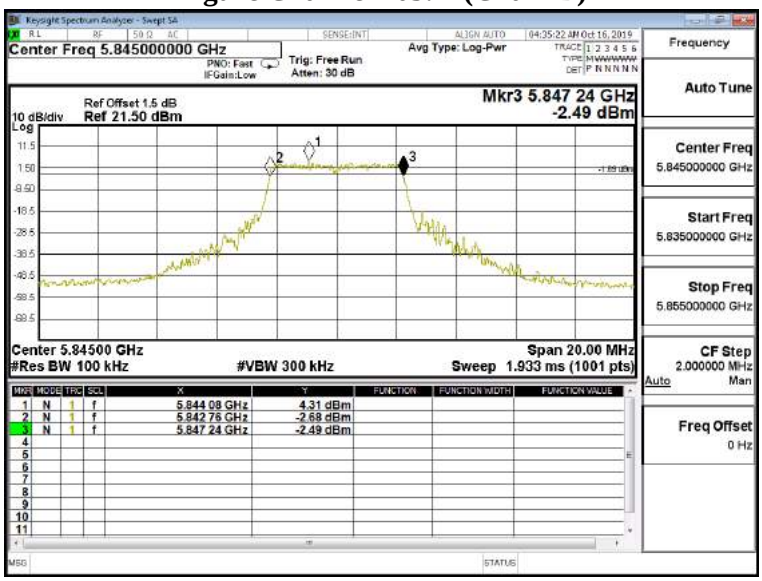
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4480	>500	Pass

Figure Channel 205: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
205	5845	4480	>500	Pass

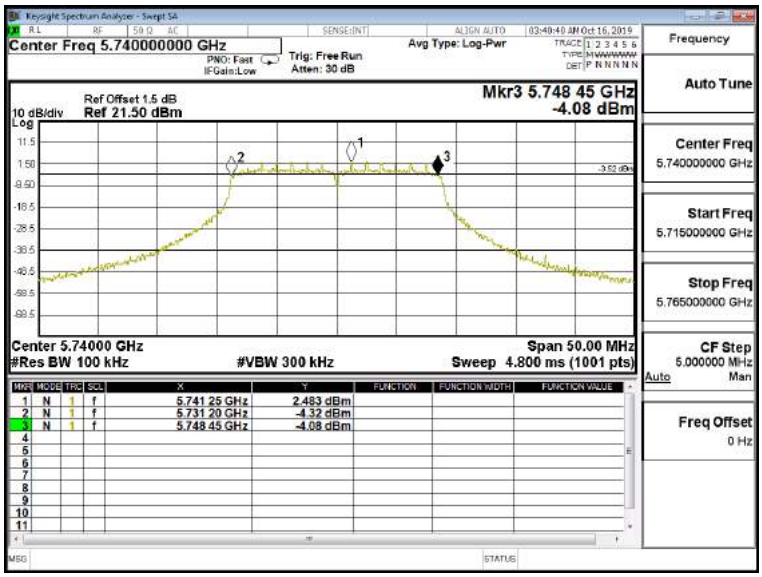
Figure Channel 205: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.8)

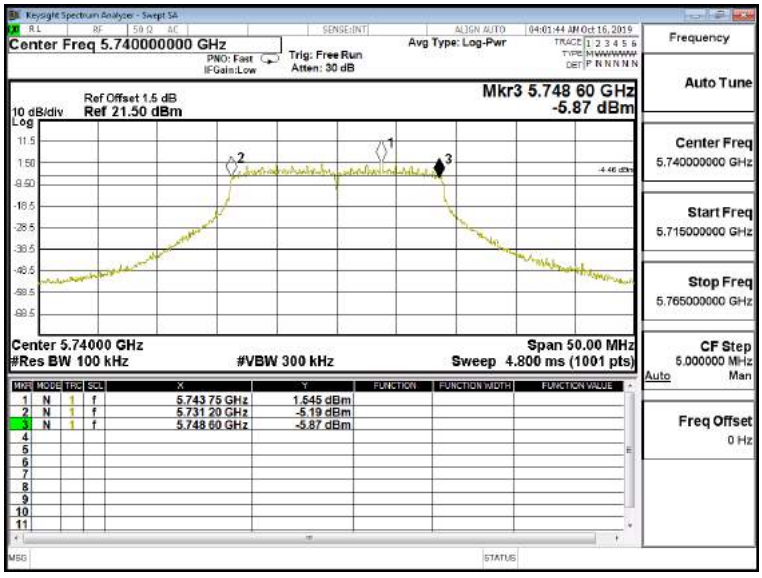
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17250	>500	Pass

Figure Channel 184: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
184	5740	17400	>500	Pass

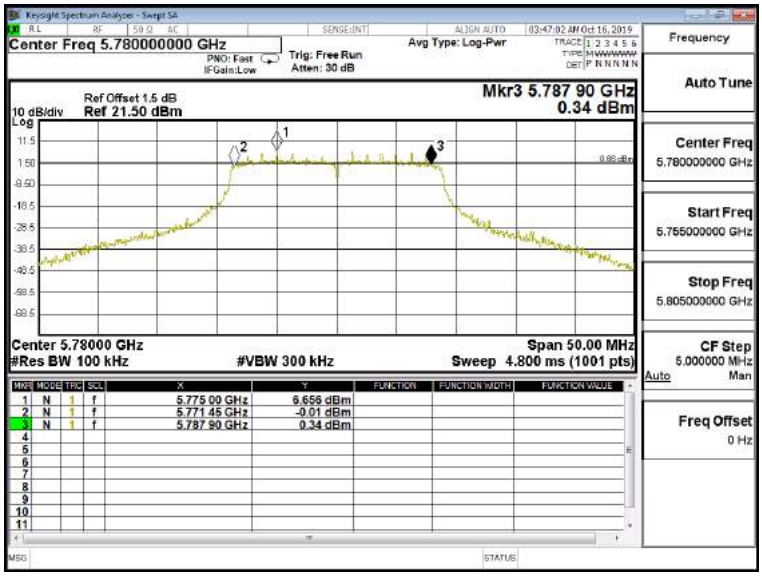
Figure Channel 184: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.8)

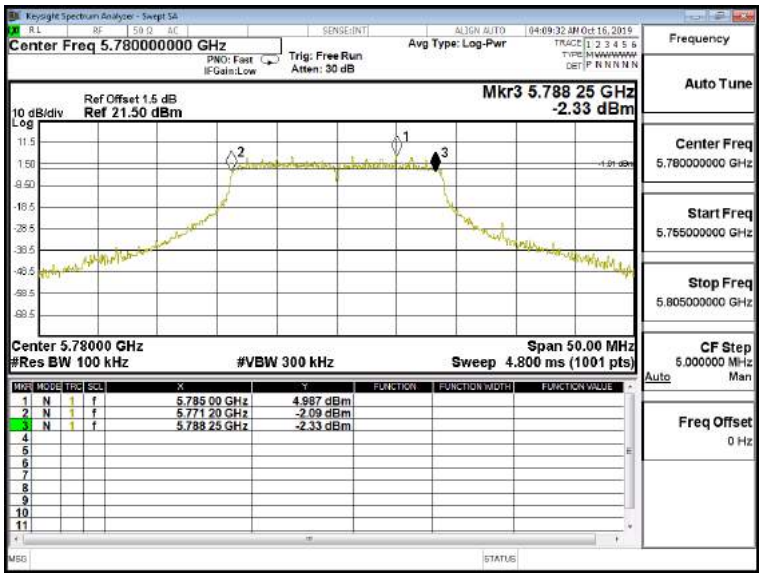
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	16450	>500	Pass

Figure Channel 192: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
192	5780	17050	>500	Pass

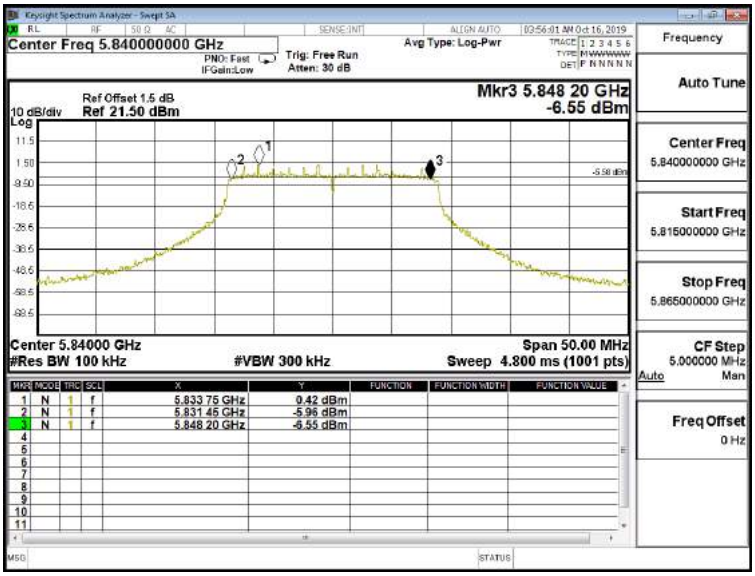
Figure Channel 192: (Chain B)



Product : Moxa 2.4/4.9/5 GHz
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Date : 2019/10/16
Test Mode : Mode 2: Transmit - (OFDM-20BW) (Antenna No.8)

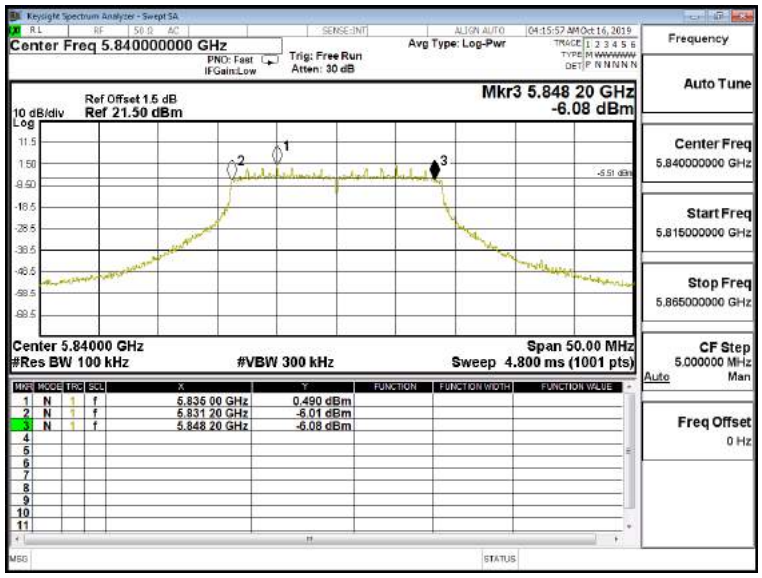
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	16750	>500	Pass

Figure Channel 204: (Chain A)



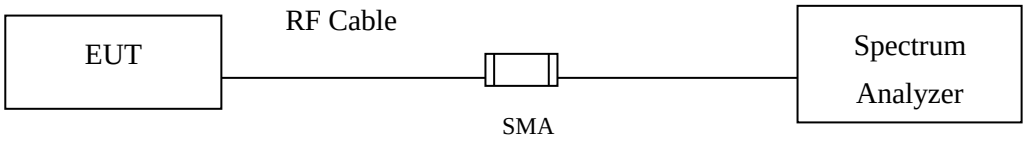
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
204	5840	17000	>500	Pass

Figure Channel 204: (Chain B)



8. Duty Cycle

8.1. Test Setup



8.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

8.3. Uncertainty

± 2.31msec

8.4. Test Result of Duty Cycle

Product : Moxa 2.4/4.9/5 GHz
Test Item : Duty Cycle
Test Mode : Transmit

Duty Cycle Formula:

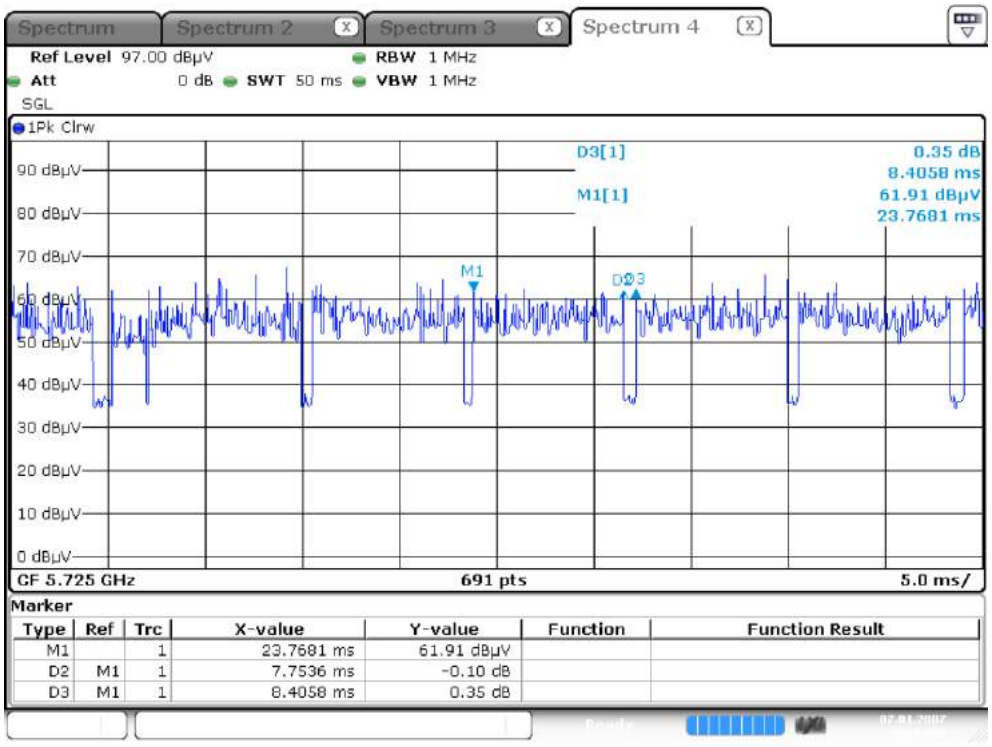
Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

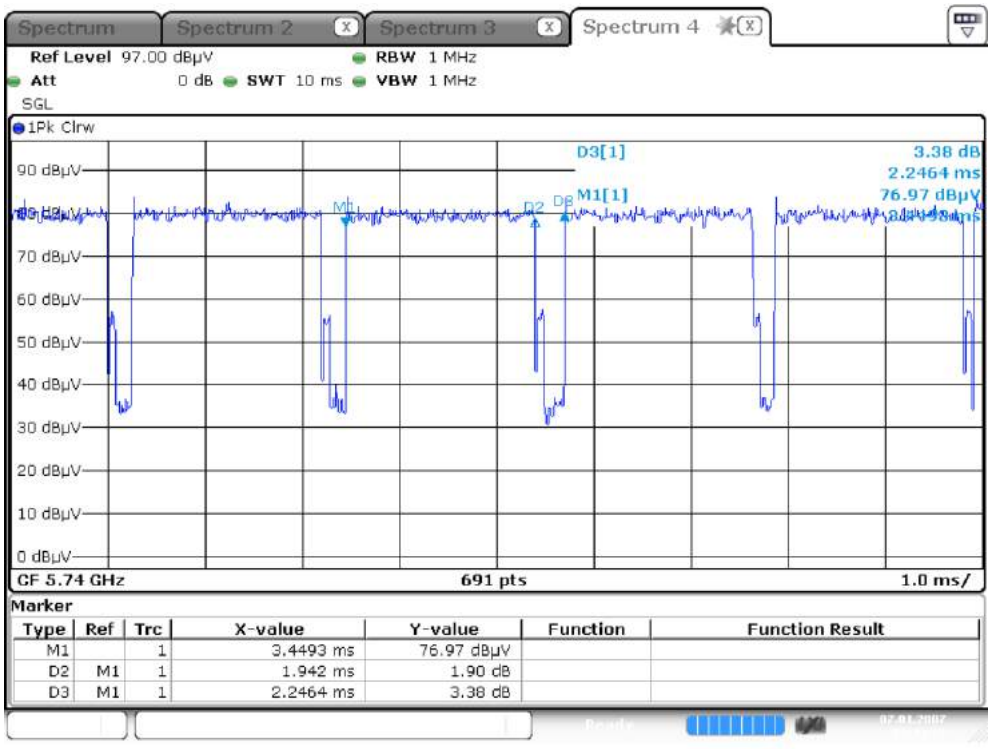
5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
5M-BW	7.7536	8.4058	92.24	0.35
20M-BW	1.9420	2.2464	86.45	0.63

5M-BW



Date: 7.JAN.2007 22:43:28

20M-BW



Date: 7.JAN.2007 23:43:12

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.